Environment Canada
Canadian Wildlife Service

Environnement Canada
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Fifty-First Federal-Provincial/Territorial Wildlife Conference

TRANSACTIONS
1987

Tuktoyaktuk, Northwest Territories
June 16 - 19

88-03401/

DATES, SITES, AND THEMES FOR FEDERAL-PROVINCIAL WILDLIFE CONFERENCES

1922-1954	Ottawa, Ontario
1955	Montreal, Quebec
1956	Vancouver, British Columbia
1957	Ottawa, Ontario
1958	St. John's, Newfoundland
1959	Ottawa, Ontario
1960	Regina, Saskatchewan
1961	Ottawa, Ontario
1962	Fredericton, New Brunswick
1963	Ottawa, Ontario
1964	Charlottetown, Prince Edward Island
1965	Winnipeg, Manitoba
1966	Quebec, Quebec
1967	Ottawa, Ontario
1968	Whitehorse, Yukon Territory
1969	Edmonton, Alberta
1970	Yellowknife, Northwest Territories
1971	Toronto, Ontario
1972	Dartmouth, Nova Scotia
1973	Ottawa, Ontario
1974	Victoria, British Columbia (People and wildlife)
1975	St. John's, Newfoundland (Wildlife values)
1976	Fredericton, New Brunswick (Federal-provincial initiatives in wildlife management)
1977	Winnipeg, Manitoba (Wildlife enforcement in Canada)
1978	Quebec, Quebec (Use of wildlife)
1979	Regina, Saskatchewan (Habitat is the key)
1980	Ottawa, Ontario (A national policy on wildlife)
1981	Charlottetown, Prince Edward Island (A national policy on wildlife--Phase II)
1982	Whitehorse, Yukon Territory (Wildlife in Canada's North)
1983	Edmonton, Alberta (Wildlife management--Today and tomorrow)
1984	Timmins, Ontario (Team-work in wildlife management)
1985	Halifax, Nova Scotia (Communicating about wildlife)
1986	Ottawa, Ontario (Canada's role in world wildlife conservation)
1987	Tuktoyaktuk, Northwest Territories (Wildlife: Agenda for tomorrow)
1988	Victoria, British Columbia
1989	St. John's, Newfoundland
1990	Winnipeg, Manitoba
1991	Fredericton, New Brunswick
1992	Ottawa, Ontario

Transactions of the
Fifty-first Federal-Provincial/Territorial Wildlife Conference
held in Tuktoyaktuk, Northwest Territories
16-19 June
1987

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CONTENTS

6 Summary of the 51st Federal-Provincial/Territorial Wildlife Conference --S. Normand

12 Welcoming addresses --J. Steen
13 --J. Bourque
14 --N. Cournoyea

Update reports

15 Action taken on recommendations of the 50th Federal-Provincial Wildlife Conference --D.K. Pollock
27 Progress on Recommendations 16, 17, 18, and 19 of the 50th Federal-Provincial Wildlife Conference --CIDA
29 National Wildlife Week --K. Brynaert
33 Wildlife Colloquium Task Force --H.A. Clarke
38 Canadian Conservation Strategy --A. Hoole

Keynote addresses

40 (1) Wildlife--a review of the past and present --R.C. Goulden
52 (2) Wildlife challenges for the future --D. Porter
57 (3) A northern-community perspective --N. Kassi

Workshops

60 (1) Examining wildlife values
  Summary of Workshop 1 report --J. Baird
61 (2) Accommodating demands for wildlife
  Summary of Workshop 2 report --M. Crystal
63 (3) Managing Canadian endangered wildlife
  Summary of Workshop 3 report --A. Martell
66 (4) Environmental contaminants
  Summary of Workshop 4 report --M. Keating
69 (5) National and international co-operative agreements
  Summary of Workshop 5 report --H. Monaghan
72 (6) Piecing together the economic picture
  Summary of Workshop 6 report --G. Finney
75 (7) New approaches and initiatives for wildlife support
  Summary of Workshop 7 report --B. Turner
78 (8) Ecological reserves or the refuge approach
  Summary of Workshop 8 report --J. Walker
81 (9) Participation in resolving issues
  Workshop 9 Chairperson's comments --P. Pearse
  Summary of Workshop 9 report --A. Hoole

Workshop reports

86 (1) Introduction
87 (2) Workshop 1--Examining wildlife values
88 (3) Workshop 2--Accommodating demands for wildlife
90 (4) Workshop 3--Managing Canadian endangered wildlife
93 (5) Workshop 4--Environmental contaminants
96 (6) Workshop 5--National and international co-operative agreements
99 (7) Workshop 6--Piecing together the economic picture
101 (8) Workshop 7--New approaches and initiatives for wildlife support
104 (9) Workshop 8--Ecological reserves or the refuge approach
107 (10) Workshop 9--Participation in resolving issues

Trapping standards and regulations across Canada

111 (1) Opening remarks --J. Bryant
112 (2) A user-group perspective --D. Haylock
114 (3) A trapper's perspective --R. Lancour
116 (4) A humane-trapping perspective --R. Gardiner

Panel on "The emerging role of native organizations in wildlife management in Canada's North"

125 (1) Opening remarks --J. Bryant
127 (2) Inuvialuit interests in wildlife --A. Carpenter
133 (3) The emerging role of native organizations in wildlife management in the North --R. Innuksuk
135 (4) Inuit and wildlife management --P. Ernerk
138 (5) Discussion

142 Conference summary

Reports

146 Northwest Territories Department of Renewable Resources
150 Alberta Fish and Wildlife Division
158 Manitoba Wildlife Branch
170 Ontario Ministry of Natural Resources
177 Newfoundland and Labrador Wildlife Division
179 Prince Edward Island Fish and Wildlife Division
189 Canadian Federation of Humane Societies --J.H. Bandow
193 Canadian Wildlife Federation --K.A. Brynaert
197 Wildlife Habitat Canada
204 Canadian Wildlife Service International Activities
207 Committee on the Status of Endangered Wildlife in Canada (COSEWIC) --J.A. Keith

211 Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES)
214 Polar Bear Administrative Committee (PBAC) --I. Stirling and K. Lloyd

216 Recommendations of the 51st Federal-Provincial/Territorial Wildlife Conference

220 Invitation to 1988 Conference --J. Walker

221 Attendance at the 51st Conference

SUMMARY OF THE 51ST FEDERAL-PROVINCIAL/TERRITORIAL WILDLIFE CONFERENCE

1. Conference opening

Kevin Lloyd, Director, Wildlife Management Division, Northwest Territories Department of Renewable Resources, was the Chairperson for the 51st Federal-Provincial/Territorial Wildlife Conference held in Tuktoyaktuk from 16 to 19 June 1987. The conference was opened by a prayer by Paul Voudrach, a Wildlife Officer from Tuktoyaktuk. Mr. Lloyd welcomed delegates to the conference and introduced special guests. He said Tuktoyaktuk was selected as the site of the conference to give people a view of the changing North and also to try to give delegates an idea of the opportunities and choices facing the people who live in the North today.

Mr. Lloyd called on the Mayor of Tuktoyaktuk, John Steen, to welcome the delegates to his town. Mr. Steen welcomed everyone to Tuktoyaktuk. He said the native people welcomed the chance to have the conference in their town because they felt that living together with wildlife and accepting industry in the North were both important to the country.

Jim Bourque, Deputy Minister, Northwest Territories Department of Renewable Resources, said it was really gratifying to be able to see the best minds in wildlife administration and management in Canada at the conference and to know that if there was a serious wildlife problem he could count on a response. He also welcomed the politicians, saying "We now have the technical capability to do the things that have to be done and the political will to do the things we have to do." Mr. Bourque said the most serious problem we have today is the destruction of habitat. He then introduced Nellie Cournoyea.

Ms. Cournoyea, Member of the Legislative Assembly for the Northwest Territories, welcomed delegates on behalf of the Government of the Northwest Territories and the people of Tuktoyaktuk. She explained that in the last few years it has been important for the governments of the Northwest Territories and the Yukon Territory to take a lead role in bringing forward the importance and the priority that should be set on the issues of man, environment, and the use of renewable resources. One other issue that concerns her greatly is the type of effect protectionist organizations have on "our ability to do the little that we have to do in utilizing our resources."

2. Presentation of the agenda

Kevin Lloyd presented the agenda, pointing out the many changes.

3. Appointment of Recommendations Committee

Chairman: Ken Brynaert (Canadian Wildlife Federation)

Secretary: Sharon Dominik (Environment Canada)

Members: Joe Bryant (Brystra Consultants)
Art Smith (Prince Edward Island)
Gilles Barras (Quebec)

4. National Wildlife Week update

Ken Brynaert, Canadian Wildlife Federation, provided information on National Wildlife Week, 1987. He said that production of wildlife kits reached a record low of 58 350 English and 4550 French (total 62 900). He stressed that National Wildlife Week is an obvious opportunity to communicate the message of conservation, which we cannot afford to ignore. Diane Griffin, Education Committee Chairperson, Canadian Wildlife Federation, is undertaking an evaluation to measure the impact of National Wildlife Week across the nation.

5. Wildlife Colloquium update

Tony Clarke gave an update on the activities of the Wildlife Colloquium Task Force. He outlined ideas that the task force was considering in the two areas of revenue generation and wildlife conservation. His complete report is included in the transactions.

6. Speech--Honourable David Porter

The Honourable David Porter, Minister of Renewable Resources, Yukon Territory, spoke to delegates about three major themes:

- the need to integrate wildlife-management considerations with the broad socio-economic decision-making processes, i.e., melding economic decisions with conservation principles;
- the need to involve user and interest groups in the management of our wildlife resources; and
- the need to achieve international co-operation in the management of wildlife and other environmental resources.

His complete report is included in the transactions.

7. Speech--Norma Kassi

Norma Kassi, Member of the Legislative Assembly, Old Crow, Yukon Territory, gave delegates a northern-community perspective. She told of the many subtle, slow changes that have taken place in her community and the concerns of her people. She spoke of her people's hopes and aspirations for the future: that the world will come together to conserve what we have left; and that the cultural and traditional values of the world's people will continue to follow the natural laws. She said that her people believe that mother earth has had enough destruction and cannot possibly handle any more. She said her people want to take care of what they have left and share it with whomever will respect it and do the same. She welcomed everyone to share the future with her people.

8. Comment on South Moresby--Barry Turner

Mr. Turner, Member of Parliament for Ottawa-Carleton, announced that negotiations on South Moresby and Lyle Island had been terminated by the British Columbia Government. He said he was going to make a statement in the House of Commons, and tie it into the conference, that there was a strong discontentment that the negotiations broke down. He was hopeful this would get some national recognition.

9. Workshops

David Neave, Executive Director, Wildlife Habitat Canada, was Chairperson for this session. He and Tom Beck, Conference Summarizer, provided instructions for the workshops. Mr. Neave mentioned that the Program Committee plans to publish the results of the workshops as an "Agenda for Tomorrow." Mr. Beck said that wildlife and the environment generally are important to Canadians, including people whose responsibility is not normally considered related to wildlife. He warned that the "Agenda for Tomorrow" will be set by others if we do not set it, and, in his opinion, the delegates to the conference were far better candidates for the task. He felt the workshops were a great opportunity to get on with the task.

The nine workshops ran concurrently, and Robyn Usher's "Workshop Reports" are included in the transactions, as well as summaries presented by the workshop rapporteurs.

10. Trapping standards and regulations in Canada

Three speakers, Del Haylock, Executive Director, Fur Council of Canada, Ron Lancour, Executive Director, Trappers International Marketing Services, and Bob Gardiner, Executive Vice-President, Canadian Association for Humane Trapping, gave presentations pertaining to trapping standardization, regulations, and humane traps. Their reports are included in the transactions.

11. Panel--"Emerging role of native organizations in wildlife management in Canada's North

Joseph E. Bryant was Session Chairperson. In his opening remarks, Mr. Bryant encouraged native peoples to attend the conference on a regular basis in order to ensure that their special concerns about wildlife are better understood by Canadians in general and other peoples.

The panel members were Rhoda Innuksuk, Inuit Tapirisat of Canada, Peter Ernerk, Tunguvat Federation of Nunavut, and Andy Carpenter, Inuvialuit Game Council.

Their reports are included in the transactions, as well as a summary of the discussion that followed.

12. Conference summary

Tom Beck of Tom Beck Consulting was the Conference Summarizer. He warned that the concerns expressed at the conference must be heeded and that every avenue must be explored to strengthen partnerships. The alternative, as he saw it, was the further erosion of our effectiveness and the decline of the values we share with respect to the wildlife resource.

He suggested that the blueprint for our "Agenda for Tomorrow" exists within the present partnership. His complete summary is included in the transactions.

13. Canadian Conservation Strategy update

Arthur Hoole, Director, Manitoba Wildlife Branch, gave a short update on the National Task Force on Environment and Economy. His report can be found in the transactions.

14. Choice of theme for National Wildlife Week, 1988

The theme for National Wildlife Week, 1988, is "Wildlife Needs Our Help."

15. Choice of conference theme for 1988

To date, a theme has not been chosen for 1988.

16. Program Committee membership for 1988

Chairperson: Jim Walker (British Columbia)

Secretary: Doug Pollock (Canadian Wildlife Service)

Members:
- Gilles Barras (Quebec)
- David Pike (Newfoundland)
- Hugh Monaghan (Yukon Territory)
- Art Martell (Pacific and Yukon Region, Canadian Wildlife Service)
- Ken Brynaert (Canadian Wildlife Federation)
- Paul Griss (Canadian Nature Federation)
- Dave Neave (Wildlife Habitat Canada)
- local wildlife organizations

17. Highlight reports

Reports were received from several jurisdictions, committees, and nongovernmental organizations, and are included in the transactions.

18. Recommendations Committee report

Ken Brynaert, Executive Vice-President, Canadian Wildlife Federation, was Chairperson for this session; 17 recommendations were approved by the conference.

19. Attendance

There were 101 registered participants at this year's conference.

20. Invitation to 52nd Conference

Jim Walker, Director, British Columbia Wildlife Branch, invited all delegates and guests to attend the 52nd Conference in Victoria, which he referred to as a garden city, the home of the "newly wed" or the "nearly dead."

21. Conference closing

Kevin Lloyd, Conference Chairperson, expressed the pleasure of his department at hosting the conference. He gave his special personal thanks to Paul Gray, Mike Sutherland, Nellie Cournoyea, Douglas Pollock, and Sylvia Normand for their hard work in making the conference a success. He thanked everyone for coming and adjourned the conference.

22. Dates of subsequent conferences

1988	14-17 June	Victoria, British Columbia
1989	20-23 June	St. John's, Newfoundland
1990	19-22 June	Winnipeg, Manitoba
1991	18-21 June	Fredericton, New Brunswick
1992	17-20 June	Ottawa, Ontario

Welcoming address (1)

John Steen
Mayor
Tuktoyaktuk

I would like to start off by welcoming you all here to Tuktoyaktuk. This is probably the biggest conference that has ever been held here. The native people here all recognize the importance of living together with wildlife and also of accepting industry in the North.

When I first came to Tuktoyaktuk, I think it was in 1962, there were geese that flew over the town every spring on their way north to the islands. Now they don't fly over Tuktoyaktuk anymore. I think the native people or people who lived here before the geese found another route north blame the detouring on helicopters. However, I think that if I were a goose and I had people shooting at my rear every time I flew over this town, I would change my route too. Maybe other animals, if they were that smart, wouldn't have so many problems. I suppose you are here at this conference to make sure the animals don't get shot at as much.

Tuktoyaktuk was a small village when I first came here. It had a federal administrator who ran the town. There was no council until some people including myself, Felix Emanuel, and a number of others started to give the federal administrator a hard time because he was acting like God and making people report to him every day. We finally were allowed to set up an Advisory Council to the administrator after the government decided that we seemed to know what we were doing. We ran the Advisory Council for a few years until we became a hamlet in 1970-71, I think. Tuktoyaktuk was the first Hamlet Council to be established in the Northwest Territories. Now all the other communities in the Northwest Territories are following the same route. Our Hamlet Council is made up of trappers and business people and a few ordinary folk, so it consists mostly of Inuvialuit people.

I hope you all have a good stay here. I think you will find the people friendly. They will always talk to you--just ask questions.

Welcoming address (2)

Jim Bourque
Deputy Minister
Department of Renewable Resources
Government of the Northwest Territories

My Minister regrets that he could not be here to give a welcoming address, as he is needed in the House. Instead, I will make a few comments on a subject that is very dear to me--wildlife, game, nature, and the land. I have spent many years working in the wildlife field--I am now in my 30th year as a wildlife manager, or perhaps I should say people manager, because wildlife have a tremendous ability to manage themselves if we can take care of the people.

I sometimes think about the tremendous responsibility that we have as wildlife managers in our respective provinces, particularly in the Northwest Territories. Wildlife in the Northwest Territories sustains life itself. If it were not for wildlife, we would have tremendous difficulty living in this part of the country. Wildlife is so integrally linked with the people that live here. It is very gratifying to see the best minds in wildlife administration and management in Canada at this conference and to know that we can draw upon all your knowledge if we have a serious problem. I am also encouraged to see that there are a number of interested politicians here today--Ministers and Members of Legislative Assemblies and Senators. We now have the technical capability to do the things that have to be done and the political will to do the things we have to do. So I would say that wildlife in Canada are fairly safe.

The only thing that really concerns me here is wildlife habitat. I think that the lack of habitat, or the destruction of habitat, is the most serious single problem that we face today. When I was a young man paddling down the Athabasca River from Fort McMurray to Fort Chipawayan, I could stop any place along the river and make a cup of tea--I did not have to worry about the quality of the water. I am not sure if I could do the same thing today. This is one of the burning issues that must be dealt with--if we have the habitat to give wildlife the chance, they will be able to bounce back, even if their numbers are down. It will require a concentrated effort by Canadians across the country, but we really must raise the profile of habitat protection and habitat restoration.

I often compare nature with a beautiful and mysterious woman, who was created not to be dominated by man but to live in harmony with man. I think that we should adopt that type of philosophy at home and also at work. If we do that and encourage our friends to do the same, I am sure that we will have a much better country to live in.

Welcoming address (3)

Nellie Cournoyea
Member of the Legislative Assembly
Government of the Northwest Territories

I would like to welcome you to Tuktoyaktuk on behalf of the Government of the Northwest Territories and on behalf of the people of Tuktoyaktuk. It is a long way from Timmins, Ontario, where I first met many of you. I know we had some difficulties in Timmins and some misunderstandings about some of the protectionist organizations, but I think many of us have gotten to understand one another better since then.

In the last several years, it has been important for the Government of the Northwest Territories and for the people who are involved with the Government of the Yukon to take a lead role in bringing forward the importance and the priority that should be set on this issue of man, environment, and the use of renewable resources. In the Northwest Territories, 85% of our people get at least part of their protein from the land, and because of that the protection of those species that we depend on is fundamentally important to us in our everyday life. What we have attempted to do, from the experience in the working relationships we have had with people from outside Canada and within Canada, is to bring an understanding to our people that no matter how hard we work to modulate what we do with our wildlife species, particularly migratory birds and animals, we must depend on other people to look after the habitat and the environment so that we can continue to utilize those species. Being in the Northwest Territories and being people who place much importance on this issue, we must raise the profile and the level of understanding in Canada, the United States, and many parts of the world. We have attempted, particularly with the Porcupine caribou herd, to bring together users from Alaska, the Yukon Territory, and the Northwest Territories and to set up guidelines concerning how we are going to deal with that very valuable resource. I believe over the years we have been successful in doing that, and the success has come from the determination of the users to make sure that happens.

I hope that our understanding of one another becomes even better at this conference. We have a great deal of energy to dedicate, for the sake of our future generations, to the effort that will be required to look after the wildlife resources. One other issue that concerns us greatly is the type of effect that the protectionist organizations have on our ability to do the little that we have to do in utilizing our resources. All of us must work together to resolve this issue.

On behalf of the Government of the Northwest Territories and the community of Tuktoyaktuk, thank you for coming so far north to this conference. You are very welcome, and I hope we can make your stay very pleasant.

Update report

ACTION TAKEN ON RECOMMENDATIONS OF THE 50TH FEDERAL-PROVINCIAL WILDLIFE CONFERENCE

D.K. Pollock
Secretary
Federal-Provincial/Territorial Wildlife Conference

Recommendation No. 1 (Appreciation for hospitality)

That the conference express its appreciation to the Government of Canada, and to the Hon. Tom McMillan, Geneviève Sainte-Marie, Tony Clarke, Doug Pollock and other staff of the Canadian Wildlife Service, for the excellent arrangements and fine hospitality extended to the delegates of the 50th Federal-Provincial Wildlife Conference.

Action

A letter was sent to the Hon. Tom McMillan expressing the appreciation of the conference for arrangements and hospitality (cc: Deputy Minister and Director General, CWS). Action completed.

Recommendation No. 2 (Thanks for reception and barbecue)

That the conference express its appreciation to Environment Canada and the Canadian Wildlife Service for the reception on the eve of the 50th Federal-Provincial Wildlife Conference, and for the barbecue on 18 June.

Action

A letter was sent to the Hon. Tom McMillan expressing the appreciation of the conference for the reception and barbecue (cc: Deputy Minister and Director General, CWS). Action completed.

Recommendation No. 3 (Thanks for breakfast)

That the conference express its appreciation to Ducks Unlimited Canada for hosting a breakfast on 18 June for delegates to the 50th Federal-Provincial Wildlife Conference.

Action

A letter was sent to D. Stewart Morrison expressing the appreciation of the conference. Action completed.

Recommendation No. 4 (Thanks for banquet)

That the conference express its appreciation to the Ministers of Renewable Resources of Yukon and the Northwest Territories for hosting the banquet on 19 June, and to Senator Bélisle for providing the Senate dining room.

Action

Letters were sent to the Hon. David Porter, the Hon. Red Pedersen, and Senator Rhéal Bélisle expressing appreciation for the banquet. Action completed.

Recommendation No. 5 (Appreciation to non-governmental organizations)

That the conference express its appreciation to participants from non-governmental organizations for their contributions to the success of the 50th Federal-Provincial Wildlife Conference.

Action

Letters of appreciation were sent to all non-governmental organizations (NGOs) attending the conference. Action completed.

Recommendation No. 6 ("World conservation strategy" Conference)

Whereas the "World conservation strategy" Conference, held in Ottawa from 31 May to 5 June 1986, has reiterated the importance of national and sub-national conservation strategies in ensuring the conservation and sustainable development of natural resources such as wildlife, soil and water, and

whereas Canada, in 1981, adopted the "World conservation strategy", and various provinces and territories are currently involved in the preparation of provincial and territorial strategies,

therefore it is recommended that the federal, provincial and territorial governments, with the assistance of interested non-governmental organizations, prepare, on a co-operative basis, a Canadian conservation strategy that will integrate federal as well as provincial and territorial strategies in a single comprehensive document that encourages the integrated management of natural resources.

Action

The Canadian Council of Resource and Environment Ministers endorsed a proposal to create a special task force, under the Chairmanship of the Minister of the Environment for Manitoba, to develop an action plan for furthering the integration of economic development with environmental quality considerations. This recommendation is on the agenda on Thursday afternoon.

Recommendation No. 7 (Wildlife '87)

Whereas non-governmental wildlife organizations are desirous of dedicating a special year to wildlife conservation in Canada, and

whereas 1987 is a particularly appropriate year to highlight wildlife conservation in that the 6th CITES Conference, the Ramsar Convention Conference and the North American Wildlife and Natural Resources Conference are being held in Canada, and

whereas 1987 marks the centennial of the establishment of Last Mountain Lake Migratory Bird Sanctuary in Saskatchewan, the oldest sanctuary in the Western Hemisphere, and

whereas federal, provincial and territorial wildlife agencies, through their respective ministers, have endorsed in principle the concept of proclaiming 1987 as a special year for wildlife,

therefore it is recommended that the 50th Federal-Provincial Wildlife Conference officially recognize 1987 as a special year for wildlife conservation in Canada to be known as "Wildlife '87", that the conference lend its support to the celebration of "Wildlife '87", and that the Program Committee for the 51st conference consider the theme "Wildlife '87, Gaining momentum".

Action

The Environment Minister, the Hon. Tom McMillan, officially designated 1987 as a year of wildlife conservation. It also marks the 100-year anniversary of the establishment of Canada's first migratory-bird sanctuary at Last Mountain Lake, Saskatchewan.

The conference encouraged all jurisdictions to participate in this special year for wildlife.

With regard to the theme, the Program Committee felt that, although "Wildlife: Agenda for Tomorrow" does not capture the theme "Wildlife '87, Gaining momentum," it does capture the intent.

The conference also encourages the use of the Wildlife '87 logo.

Recommendation No. 8 (Wildlife damage control)

Whereas some populations of wildlife for which there is strong public demand can be depleted to unacceptable levels due to the action of predators, and

whereas wildlife-caused damage to agricultural crops and private property may cause economic hardship, therefore it is recommended that control of predators and problem wildlife be conducted according to the following statement:

Consensus statement on the control of wildlife that causes damage

It is recognized that provinces and territories may have different objectives in the management of wildlife and that each jurisdiction is committed to the principle of the scientific management of all species to meet these diverse objectives. It is acknowledged that some species have the potential to adversely affect human safety, property and management objectives for other species. Where it is thought appropriate that such species be controlled, The Wildlife Society's "Policy on wildlife damage control" will be used as a general guideline, recognizing that local conditions will dictate the details of its implementation.

The Wildlife Society's "Policy on wildlife damage control"

The policy of The Wildlife Society, as regards control of animal damage, is to:

(1) support only those animal control programs that are justified biologically, socially and economically;

(2) encourage continuing research designed to improve methods of:

  (a) accurately assessing the damage caused by wildlife,

  (b) controlling and preventing animal damage, especially by non-toxic means, and

  (c) measuring the effectiveness of damage control programs;

(3) recommend that efforts of control be the minimum required to bring damage within tolerable limits;

(4) support the use of only the most efficient, safe, economical, and humane methods to control depredating animals, and advocate effective lethal control only when other methods are unsatisfactory.

(5) urge that all control programs directed at wildlife populations and species be regulated closely by provincial, territorial or federal laws.

Action

Letters were sent to all jurisdictions indicating that the conference had unanimously accepted this policy and asking that it be brought to the attention of appropriate officials.

Recommendation No. 9 (Hunting and trapping)

Whereas hunting and trapping are regarded by wildlife management agencies as legitimate and desirable uses of wildlife, and

whereas wildlife management agencies perceive the need for a statement of government support for hunting and trapping,

therefore it is recommended that the following statement on hunting and trapping be endorsed by each provincial, territorial and federal wildlife agency:

Consensus statement on hunting and trapping as desirable uses of wildlife

Consistent with the "World conservation strategy", the primary goal of wildlife management in Canada is to maintain the natural diversity and abundance of wildlife over its traditional range. Secondary objectives are to provide wildlife in sufficient abundance to meet the aesthetic, cultural, recreational and economic needs of society, and to manage wildlife populations at levels which are compatible with other resource and community interests. Due to this wide variety of uses of wildlife and the demands of other land and water users, most wildlife populations must be actively managed in order to sustain and, where appropriate, increase their numbers through enhancement and regulation of use. As part of this management strategy, hunting and trapping are recognized as pursuits which are deeply rooted in Canada's outdoor heritage and culture, and are honourably tied to our history and evolution. Moreover, hunting and trapping can generate an appreciation and understanding of natural environments, characteristics which are seen as desirable elements of the Canadian identity.

These activities will be managed so that they will not endanger the ecological well-being of animal populations, and where methods and practices are employed that reflect respect and dignity for the animal. The interests, feelings and opinions of non-hunters and non-trappers will be considered in managing hunting and trapping.

The federal, provincial and territorial governments, with due regard to the humane and ethical considerations outlined, are fully committed to the perpetuation of hunting and trapping and to the protection of the opportunity of Canadians to pursue these activities.

Action

Letters were sent to all jurisdictions indicating that the conference had unanimously accepted this statement and asking that they take the action necessary to bring this statement to the attention of appropriate officials.

Recommendation No. 10 (CITES)

Whereas Canada will be hosting the next meeting of the Parties to the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES) in July 1987 in Ottawa, and

whereas the occasion provides a unique opportunity for Canadians to demonstrate to CITES delegates from other nations the richness of Canada's wildlife resources, the beauty and extent of our nation and the unity of its people,

therefore it is recommended that the provinces, territories and federal government and interested NGOs begin immediately to support the Activities and Special Events Committee in providing educational demonstrations and materials emphasizing the distribution, abundance and wise use of our wildlife resources, and

the Canadian delegation to CITES be selected immediately so that it might be adequately prepared to deal with the issues in a unified and informed fashion.

Action

Arrangements are on schedule for the CITES Conference, which will be held in Ottawa on 12-24 July 1987.

Recommendation No. 11 (International Symposium on Agriculture and Wildlife)

Whereas strategies are needed to involve the agricultural community in achieving the objectives of the "North American waterfowl management plan" (NAWMP), and

whereas the general dependence of wildlife on agricultural land and the practices used thereon is a crucial and on-going concern of wildlife managers,

therefore it is recommended that an International Symposium on Agriculture and Wildlife be held in 1989 or earlier, and that one of its sessions be aimed at addressing the particular needs under the NAWMP, and that a three-person committee report to the 51st Federal-Provincial Wildlife Conference with recommendations for location, outline of theme, expansion. timing, etc. for further direction from this conference.

Action

A committee has been set up consisting of Jim Patterson (Canadian Wildlife Service); Donald Simkin (Ontario); Dennis Sherratt (Saskatchewan); and David Neave (Wildlife Habitat Canada). This recommendation is on the agenda on Thursday afternoon.

Recommendation No. 12 (Wildlife Colloquium)

Whereas a Colloquium of Wildlife Ministers was held in Ottawa on 6-8 May 1986 to discuss innovative ways of funding and developing new approaches to wildlife management, and

whereas the Ministers directed that they receive a report developing the many ideas put forward at that conference,

therefore it is recommended that the conference accept the verbal report on the Colloquium submitted by Dr. David Munro and recommend that a task force be set up to oversee and co-ordinate further consideration of the findings of the Colloquium, and that the task force report to the Ministers within one year.

Action

A task force was set up consisting of representatives from the Canadian Wildlife Service (Chair); Newfoundland; Quebec; British Columbia; Canadian Nature Federation; Canadian Wildlife Federation; and Wildlife Habitat Canada. Joe Bryant has been hired on contract as project manager. A report will be presented to Wildlife Ministers at their fall meeting. This recommendation is on the agenda on Tuesday morning.

Recommendation No. 13 (Commendation to Saskatchewan)

Whereas the "North American waterfowl management plan" (NAWMP) will significantly enhance soil and water conservation, along with waterfowl and other wetland wildlife production, and

whereas Canada has signed the NAWMP, and

whereas Saskatchewan has taken a bold and forward step in committing resources towards implementation of the plan in that province,

therefore it is recommended that Saskatchewan be commended for its initiative, and that other provinces, territories and federal jurisdictions similarly take prompt action to implement the plan in their areas or sectors of responsibility.

Action

A letter of commendation was sent to the Hon. Colin Maxwell. Letters were sent to all other jurisdictions urging them to take prompt action to implement the plan in their areas or sectors of responsibility.

Recommendation No. 14 (Ramsar Conference)

Whereas the well-being of Canada's waterfowl resources is dependent on wetlands in other nations, and whereas the protection and conservation of wetlands is essential to the achievement of the objectives of the "North American waterfowl management plan", and

whereas the Government of Canada and the Government of Saskatchewan are hosting the 1987 Conference of Ramsar Parties in Regina and are thus continuing to play a lead role,

therefore it is recommended that:

(1) all interested groups commit finances or assistance, wherever possible, to ensure the success of the 1987 Regina conference,

(2) Canada support the proposed amendments to the Convention text which will make the Convention machinery more effective,

(3) the governments of Canada and of the provinces and the territories take direct action to designate new wetlands of international importance for the Ramsar list to coincide with Wildlife '87, and

(4) the opportunity provided by Wildlife '87 and the Regina conference be used to increase public awareness of the need for retention and wise use of wetlands.

Action

The conference requested all jurisdictions and national NGOs to take action to implement this recommendation in their jurisdictions/organizations.

Recommendation No. 15 (National Wildlife Week)

It is recommended that the 36 recommendations of the report of the committee which reviewed the National Wildlife Week program in 1984, and which were accepted by the Federal-Provincial Wildlife Conference at Timmins as guidelines for the National Wildlife Week program (Recommendation No. 10), be formally sent out as guidelines to the provinces, territories and Canadian Wildlife Service in furthering effective implementation of the program.

Action

The 36 recommendations were again sent out to all jurisdictions. A letter was sent to the Canadian Wildlife Federation (CWF) advising the recommendations had been sent out and asking CWF to take follow-up action, if necessary.

Recommendation No. 16 (Workshop 1 - Twinning of wildlife agencies)

It is recommended that the Federal-Provincial Wildlife Conference request CIDA to explore the possibility and mechanisms of twinning wildlife agencies in Canada with selected, suitable agencies in developing countries. The report could prepare profiles and descriptions for Canadian and overseas agencies examining such things as capabilities, objectives, benefits, drawbacks, needs and attitudes.

Action

The Canadian International Development Agency (CIDA) has hired Paul Dean on contract. An interim report will be available at the conference.

Recommendation No. 17 (Workshop 1 - Environmental assessment)

It is recommended that the conference endorse the development of an environmental assessment review process by CIDA for all projects, and encourage other agencies involved in funding development and industrial projects in developing countries to adopt appropriate environmental impact assessment policies. The policies should give attention to post-project evaluation.

Action

CIDA has hired Paul Dean on contract. An interim report will be available at the conference.

Recommendation No. 18 (Workshop 1 - Wildlife management workshops)

It is recommended that the conference request CIDA to examine the possibility of a series of wildlife management workshops in developing countries in co-operation with selected Canadian university and college faculties, and with the Federal-Provincial Wildlife Conference or an NGO.

Action

CIDA has hired Paul Dean on contract. An interim report will be available at the conference.

Recommendation No. 19 (Workshop 1 - CIDA's wildlife conservation projects)

It is recommended that the conference request CIDA to review the appropriateness of its level of funding for wildlife conservation projects as a proportion of its total budget.

Action

CIDA has hired Paul Dean on contract. An interim report will be available at the conference.

Recommendation No. 20 (Workshop 2 - Canadian Wildlife Service - International activities

Whereas lack of information and misconceptions of Canada's wildlife programs affect our country's reputation and our use of natural resources,

therefore it is recommended that federal, provincial and territorial wildlife agencies improve the marketing of Canadian wildlife programs which are consistent with the "World conservation strategy" by:

(a) having the Canadian Wildlife Service take a leadership role in disseminating information on these programs to the international media,

(b) taking advantage of international meetings to promote wildlife programs through exhibits,

(c) liaising with media of foreign countries to come and discuss these programs, and

(d) having the Federal-Provincial Wildlife Conference appoint a media contact person on the Program Committee to develop a communication plan to promote the conference and ensure the dissemination of conference results.

Action

(a) Information on Canadian wildlife management programs such as humane trapping and research on various species has been sent to the international media.

(b) There will be a significant exhibit on wildlife management in Canada at the CITES international meeting in July. There will be approximately 700 delegates.

(d) There have been a few contacts with media from foreign countries, and, as opportunities arise, other contacts will be made. At the same time, our embassies and consulates in foreign countries do liaison work with the international media on Canadian issues.

(e) Sharon Dominik, Manager, Communications Branch, Saskatchewan District, Environment Canada, is the media contact person on this year's Program Committee.

Recommendation No. 21 (Workshop 2 - International wildlife conservation)

Whereas Canada presently needs a stronger focus on international wildlife conservation,

therefore it is recommended that the Canadian Wildlife Service, in consultation with the provinces and territories, take steps to deal more effectively with international wildlife issues.

Action

(1) A position was established at Canadian Wildlife Service headquarters to advise the Director General on international and scientific affairs in order to enable him to deal more effectively with international wildlife issues.

(2) A Canadian Wildlife Management Exhibit is being prepared to familiarize people with Canada's wildlife management practices and make them aware of Canada's positive achievements in this area.

Recommendation No. 22 (Workshop 2 - Wildlife education)

Whereas education is one of the major pillars of wildlife conservation,

therefore it is recommended that the federal, provincial and territorial wildlife agencies and non-governmental organizations expand their work with departments of education to incorporate wildlife management concepts into school curricula.

Action

Jurisdictions and national NGOs were contacted and asked to implement this recommendation. Indian Affairs and Northern Development was also contacted regarding federal schools for natives. P.E. Bisson, A/Director General Education Branch of Indian Affairs and Northern Development, agreed that all schools, whether they be public, private, or Indian, would benefit from incorporation of wildlife management concepts in the school curriculum. The instructional program in reserve schools is based on the curriculum applicable in the province in which the school is located. The instructional program also provides for the adaptation of the curriculum to meet the cultural and educational needs of the students. Mr. Bisson felt it was appropriate to recommend to departments of education that work in wildlife conservation be included in their curricula.

Recommendation No. 23 (Workshop 2 - Agency reports on international wildlife conservation efforts)

It is recommended that the federal, provincial and territorial wildlife agencies report regularly to the Federal-Provincial Wildlife Conference on their efforts in aid of international wildlife conservation.

Action

Jurisdictions were asked to include information on their efforts in aid of international wildlife conservation in their reports to the conference.

Recommendation No. 24 (Workshop 3 - CITES)

Whereas a number of deficiencies have been identified in the structure and procedures of CITES,

therefore it is recommended that CITES pursue its efforts to make the necessary adjustments to its structures and procedures in order to make its meetings and decision-making process more effective. Furthermore, the CITES Secretariat is encouraged to take the necessary steps to ensure that proposals for additions to or deletions from CITES Appendices are scientifically and statistically sound.

Action

(1) Rules of Procedures will likely be amended at the July meeting in order to allow the Chairman to better direct and control the meeting.

(2) The Canadian Scientific Authority is reviewing all proposals to amend the appendices to ensure that proposals are scientifically and statistically sound.

Recommendation No. 25 (Workshop 4 - Invitation - External Affairs)

It is recommended that a letter be sent to the Department of External Affairs, by the Secretary of the conference, expressing the regret of the conference that a representative from that department was not present at the 50th Federal-Provincial Wildlife Conference.

It is further recommended that the Department of External Affairs be urged to attend relevant Federal-Provincial Wildlife Conferences, and that its contact person for wildlife-related international issues be invited to make a report on that agency's wildlife-related operations.

Action

A letter of regret was sent to External Affairs. Douglas Sirrs will be attending this year's conference. He has been asked to prepare a report for distribution at the conference.

Update report

PROGRESS ON RECOMMENDATIONS 16, 17, 18, and 19 OF THE 50TH FEDERAL-PROVINCIAL WILDLIFE CONFERENCE

Canadian International Development Agency (CIDA)

The 50th Federal-Provincial Wildlife Conference requested the Canadian International Development Agency (CIDA) to develop a number of initiatives related to international wildlife conservation. This report briefly outlines the progress of CIDA's response.

A consultant has been retained to examine the proposals put forward in the recommendations and to prepare a report outlining possible courses of action where appropriate. The final report will be available to the Conference Secretariat for the 52nd Federal-Provincial/Territorial Wildlife Conference, with the hopes that there will be provision on the agenda to discuss the findings and possible actions that may arise from Recommendations Nos. 16 and 18 or other recommendations that relate to international matters in which CIDA has an interest.

Recommendation No. 16: Twinning of wildlife agencies

The consultant, Mr. P.B. Dean, has been retained and will be contacting each of the provincial and federal directors with a questionnaire followed by a personal interview. He will establish a profile description of each of the departments for the purpose of matching profiles with profiles from selected developing-nation wildlife departments. Possible mechanisms for co-operative twinning arrangements will also be discussed and a report prepared for discussion at the 52nd Federal-Provincial/Territorial Wildlife Conference in Victoria.

Recommendation No. 17: Environmental assessment

CIDA has instituted an environmental strategy whereby all projects within the Bilateral Branch are screened for environmental influences and assigned a code number according to the system developed by the Federal Environmental Assessment Review Office (FEARO). Those codes are reported to FEARO quarterly and are published in their review. The Environmental Advisor's office within CIDA has recently been expanded to a sector to assist the branches in addressing environmental aspects of projects as they are developed. The process is still evolving within the agency, but there is good co-operation, and progress is encouraging. In addition, CIDA is reviewing and co-operating with the World Bank on the development of their environmental program, and is participating in the development of Environmental Impact Assessment (EIA) strategies with the Organization for Economic Co-operation and Development (OECD) countries. CIDA was Vice-Chairman of the Ad Hoc Working Group for the OECD Environment Committee from November 1984 to January 1986.

Recommendation No. 18: Wildlife management workshops

The consultant will assess the interest and potential for a series of international, regionally oriented wildlife management workshops among selected less-developed countries (LDCs) and international organizations and recommend follow-up actions.

Recommendation No. 19: CIDA's wildlife conservation projects

CIDA's bilateral program is responsive to requests submitted by developing nations. The requests are then reviewed in relation to CIDA's current major fields of interest. World economics and natural-resource catastrophies in the last few years have meant that wildlife-related projects have not received high priority among the aid requests of developing nations. However, the recent, growing environmental awareness of the relationship between resource conservation, sustainable production, and development has increased the conservation and ecological aspects of project requests and program delivery. It is anticipated that there could be a growing increase in the number of resource conservation-oriented projects with wildlife and/or National Park components. CIDA's Forestry Sector, which is responsible for wildlife conservation and parks, has recently engaged two wildlife/parks specialists on standing-offer contracts to examine and advise on potentials in this field. Finally, CIDA will send an officer from the Forestry, Wildlife and Parks Section to attend the 1987 Ramsar meeting in Regina. This meeting is also receiving CIDA funding through support of the International Union for Conservation of Nature and Natural Resources (IUCN).

Update report

NATIONAL WILDLIFE WEEK

Ken Brynaert
Executive Vice-President
Canadian Wildlife Federation

Last year, the Canadian Wildlife Federation expressed a number of serious apprehensions concerning the viability of the National Wildlife Week program. It is, therefore, very encouraging to note that greater efforts have been made in a number of areas across Canada to increase the awareness activities. Nevertheless, we are still concerned about the overall effectiveness of our efforts which are directed towards educators and young Canadians.

Last year, I remarked that our distribution of 1986 kits hit a record low, with a production of 68 000 units. You may recall that these were in English only. Our 1987 kits were produced in both official languages, 58 350 in English and 4550 in French, so we've set a new record. It may be argued that playing the numbers game is not an adequate measure of the success of the National Wildlife Week program; instead, we should strive for quality of delivery rather than quantity mailed. This view may have merit, and perhaps it should be raised for discussion.

It has always been our understanding that the purpose of the school program was to reach as many educators in the elementary levels as possible, and to entice these educators to participate in a meaningful way. To accomplish this objective, we have taken great care and invested considerable time in testing and developing a quality program that would be well received by that audience. For the past 3 years, we have set in place a rudimentary evaluation process to assist us in determining whether or not educators respond well to our materials. Our feedback has shown that the kits appear to be well received and are retained for future use.

It is not my intention to dwell on statistics: these have been distributed to all the wildlife agencies participating in the program. It is interesting to note, however, that virtually all of the approximately 400 responses we received by 30 April of this year were extremely positive in their assessment, even more positive than we could have anticipated. As well, those individuals intimately involved in delivering and administering the program kits within their agencies have expressed the view that the program has improved in quality each succeeding year.

In view of these very encouraging responses, by both agencies and educators, we are, quite frankly, puzzled by the apparent lack of enthusiasm and commitment to substantially increase the levels of participation. I believe that it is fair to state that we all recognize the value of communicating the message of conservation, as pointed out by Rich Goulden in his keynote address.

National Wildlife Week is an obvious opportunity that we cannot afford to ignore. The week offers a unique opportunity to promote our wildlife concerns on a massive scale annually, to educators both within and outside of formal educational institutions. I firmly believe that, in principle, we would all agree that the educational sector is a priority target audience for our message. However, in view of the declining efforts to communicate to the educational sector during National Wildlife Week, it is clear that concerted action is essential to reverse the downward trends.

I suspect that one major impediment may be the lack of conviction by some that the program has real merit in terms of its impact and influence. It could be argued that given fiscal-restraint policies, short-term programs are of less value than those which more adequately serve longer-term goals. If a decision has to be made, the National Wildlife Week program becomes a convenient target to cut back or even eliminate.

Although the Canadian Wildlife Federation is deeply committed to furthering educational goals during National Wildlife Week, we have no concrete evidence that the National Wildlife Week program is in fact an important factor in increasing awareness of wildlife and in encouraging positive attitudes and actions towards renewable resources and their management across Canada. We have conducted surveys of use, as mentioned earlier. Some jurisdictions have sought input from their staff associated with the delivery of the program, and these have shown positive results. But these initiatives serve only as guides: they do not measure the impact of the program across our nation, nor do they address the question of attitudinal changes through its use.

Evaluation of the program

Ultimately, we have no way of assessing the real value of the National Wildlife Week program in these terms, apart from some speculation. What is needed is an in-depth evaluation conducted by an independent body. I would suggest that the results of such an evaluation would also serve as a useful tool to determine if the present program, structure, delivery mechanism, and approach should be radically changed. I am not suggesting that we entertain the notion that the program be discarded. The Canadian Wildlife Federation is deeply committed towards ensuring that conservation-education goals are met in Canada. We remain committed to the concept of a National Wildlife Week program and to our role as national co-sponsors on your behalf.

As you may be aware, the National Wildlife Week program represents a considerable investment of both Canadian Wildlife Federation staff time and cash expenditures. That investment is never calculated into the cost of the kits; it is the Canadian Wildlife Federation's contribution to the program. Only material and physical production charges are recoverable, when possible, and these we attempt to keep as minimal as possible. For this reason, we will undertake a leadership role in initiating and co-ordinating an evaluation. Our Education Committee Chairman, Diane

Griffin, has agreed to undertake this project. You can be assured that your support, input, and assistance will be requested in the months ahead.

During this past year, 11 of the 13 wildlife agencies participated in the program. It is our hope that in 1988, the program will be truly national, and all jurisdictions will be involved as genuine co-operative partners. I would like to comment that I personally feel very disappointed in the lack of participation in this program. I refer to Rich Goulden's keynote address in which he talked about how the trends were changing in terms of priorities established by this group. Certainly, education/communication has consistently risen in terms of this group's priorities, whereas efforts in a program like National Wildlife Week have declined. I know, for example, that this year is the first year that the federal Minister of the Environment did not even acknowledge National Wildlife Week, notwithstanding a request from the Canadian Wildlife Federation for a press release or a statement in the House of Commons. If that is the way things are going, I think the recommendation that we are making here for an evaluation of the viability of this program should be undertaken by the Federal-Provincial/Territorial Wildlife Conference.

Future activities

This coming year, we have proposed to develop a unit devoted entirely to endangerment--a subject area in which many educators have expressed a high degree of interest. Although we will feature endangered species in this package, we will be heavily emphasizing the need for habitat improvement and responsible attitudes and actions. Our prime purpose in terms of the approach we are using is to develop positive "what-can-I-do" activities to inspire optimism among students and educators.

For 1989, we would propose that we develop a unit that reflects the principles of sustainable development--a further extension of the process of promoting the World Conservation Strategy we have witnessed in recent years.

I feel that you would agree that the idea of "sustainable development" as a theme wording would be difficult for youngsters to grasp. What we propose is to approach the topic from the perspective of "rationally planning for wildlife"--a topic that could easily focus on and be linked with the immediate surroundings and environment familiar to children and related to wildlife and its habitat.

Student achievements

Before I close, I would like to make one final comment. Last year, when the conference was held in Ottawa, we had the opportunity to view a number of award-winning submissions by individual students and classes that expressed what they had learned about these resources. It is often truly inspiring for us, as adults, to experience their profound concerns, insights, and commitment.

This year, the Canadian Wildlife Federation witnessed what was, in our view, a remarkable achievement initiated by two 9-year-old students--Sarah Pugh and Trisha Van Bellem--of McNaughton Avenue Public School in Chatham, Ontario. These two youngsters, on their own initiative, raised over $1000 for wildlife by collecting $0.03 donations through the 1986-87 school year and, in due course, inspired the entire school to become involved in promoting the cause of wildlife. We were deeply moved by their level of effort, their message of concern, and the extent to which they took their cause so that wildlife would benefit. We believe that they represent the true spirit of what the National Wildlife Week program is all about in terms of instilling a sense of commitment, awareness, and, in this case, vigorous action to foster positive attitudes. And, indeed, it is that spirit we should all seek to inspire among our youth every year--and we can only hope to cultivate it by taking the initiative ourselves to provide the basis for that inspiration.

Update report

WILDLIFE COLLOQUIUM TASK FORCE

H.A. Clarke
Director General
Canadian Wildlife Service

At the end of the Wildlife Colloquium, held on 7-8 May 1986, the Ministers decided that a Task Force should be set up to follow up the conclusions of the colloquium and to make substantive recommendations to the Ministers. The Task Force was set up with representatives from the provincial governments, non-governmental organizations (NGOs), and the federal government.

The Task Force generally broke its work down into two major areas:

- new approaches to wildlife conservation; and
- methods of raising new sources of revenue to fund these new approaches to wildlife conservation, because wildlife management in Canada, like a lot of other things, is under financial constraints.

The Task Force met a number of times between last fall and this spring. Its report is just about completed. I would now like to share some of the ideas contained in it with you. We hope that there will be a Ministers' meeting this fall to discuss the report.

The Task Force examined the best ideas that came out of the Wildlife Colloquium discussion on revenue generation and new approaches to wildlife conservation and assessed which it thought were the most pragmatic and feasible. Within each area of revenue generation and wildlife conservation, we picked about 10 specific projects; each project had a project leader who was mandated to develop it, bring it to the Task Force, develop recommendations, and so on.

Revenue generation

Excise tax

The special excise tax on goods used in wildlife-related activities was, without doubt, the cornerstone of the revenue-generation think-tank. Barry Turner, MP, was in effect the project leader for that particular exercise, as the project was really very political and Turner had been pushing for it anyway. The excise tax, to date, has not been accepted by the federal government as a way of raising money for wildlife conservation in Canada. However, in the view of the Task Force, the excise tax continues to be a viable, realistic, and pragmatic way of raising revenues for wildlife conservation in the future. The concept has been developed and fleshed out, and it is now sitting on the shelf waiting for the most appropriate time to be brought back off the shelf.

The political climate does not seem quite right at this time for the excise tax because of regulatory reform, among other things. At the same time, however, there have been ongoing discussions within the federal government as to how revenues earmarked for wildlife conservation could be raised. I hope that before this special year of Wildlife '87 is over there is going to be very good news about new funds for wildlife conservation in Canada.

Income-tax check-off

Another project of revenue generation that was explored was the income-tax check-off. That system is working in the United States in a large number of states. Several NGO organizations and provinces have analysed this particular system. We attempted, within the Task Force, to bring all of this analysis and expertise together. The conclusion is that this seems to be a perfectly feasible and acceptable way of raising money for wildlife. The Task Force will be recommending to the Ministers in the fall that they should seriously consider implementing a provincial income-tax check-off system in their provinces. We will be choosing our words very carefully, because each province may take a different approach or may have a different opinion. But we are going to suggest very strongly to the Wildlife Ministers that they think seriously about how this can be done. Of course, they will need the help of the federal government.

Provincial lotteries

Another project for raising funds for wildlife conservation that was looked at is provincial lotteries. Although the federal government does not have any lotteries, there are a lot of provincial lotteries raising money that is already earmarked. However, we feel that there could be a good argument made that during National Wildlife Week, and only during National Wildlife Week, a lottery within a province could donate a portion of its profits of that particular week towards wildlife conservation in that particular province. The suggestion is that those proceeds would go to NGOs for worthwhile conservation practices in those regions, provinces, or territories. To accomplish this will require great marketing skills by some of the Wildlife Ministers in these jurisdictions. It will be difficult, but we think that this has some appeal, particularly during the National Wildlife Week phase.

User fees

There was a lot of discussion about user fees and how these should relate to the value of wildlife. We agree that user fees should relate to the value of the wildlife resource, but we were not able to come up with anything definitive except a general recommendation that the provinces and jurisdictions should be looking at user fees, which they are doing anyway.

Canadian conservation bond

Finally, there was much talk about a Canadian conservation bond. This would be like a Canada Savings Bond, whereby the differential between what you would get, say 5%, and what the government would make, say 8 or 9%, would go towards some sort of a major capital fund for wildlife conservation across Canada. There are some problems associated with it; for example, the federal government would have to issue the bond, and we would be in competition with the Canada Savings Bond. We did not pursue this idea a great deal, but we thought we should not discard it, and it is being suggested to the Ministers as something that could be considered.

In summary, I think that we have some very good ideas for revenue generation that could be developed: the excise tax, the income-tax check-off, a portion of provincial-lottery revenues during National Wildlife Week, and a conservation bond.

Wildlife management and conservation

Regarding new approaches to wildlife management and conservation, the emphasis of this whole exercise was on "new," because we are expecting that current activities are going to continue.

Regional institutes

One of the best ideas that came out of the Wildlife Colloquium was the question of co-operative research. The general feeling was that there is not enough research into wildlife programs in Canada. We cribbed from the American model and attempted to customize the model in a Canadian way. George Scotter, from the Canadian Wildlife Service, travelled extensively and talked to a lot of people across the country, and has developed an excellent proposal on how we might implement this idea across Canada. We are talking about regional institutes, within universities that have some expertise in wildlife management across the country, which would address regional wildlife problems. These institutes would be part of a partnership between governments, federal and provincial or territorial, and NGOs and universities. Of course we would need some core funding, and the federal government is expected to lead in this area. This is a very good proposal, and we believe that it will, over time, produce some very high-quality research and address some research needs in Canada. This is something that I think we can sell to the Ministers very easily.

Endangered-species conservation

Another idea that came out of the Wildlife Colloquium (in fact, it had already started before the colloquium) was in the area of endangered wildlife. Many provinces and territories have their own programs. The federal government helps in a co-ordinating fashion, facilitating, encouraging, and bringing some national overview to some of these programs. NGOs are also involved--the World Wildlife Fund, for example. There was a general feeling that the approach to endangered-species conservation in

Canada lacks focus, and that there were poor linkages between the various agencies and components of status and action plans, implementation, and funding. Just this week we received a very good proposal, called RENEW, to help bring a more focused approach to endangered-species recovery in Canada. I must thank the Yukon for taking a lead role in this, in tandem with the Wildlife Colloquium. The proposal will involve a variety and a multitude of partners. That is not really new, but the approach is better focused than previous ones, and I think the Ministers will accept it at their next meeting.

Habitat protection

Colin Maxwell, Minister of Parks and Renewable Resources for Saskatchewan, said at the Wildlife Colloquium that the three biggest problems in wildlife conservation in Canada are habitat and habitat and habitat. We could not conclude our colloquium work without looking at habitat. We are doing a lot of good things in habitat nationally: the provinces and territories have a lot of programs going; there have been a lot of new initiatives in recent years with Wildlife Habitat Canada and Ducks Unlimited; and the North American Plan has been signed, that broad strategy as to how we are going to bring back duck populations. The feeling was, however, that more needs to be done, because there are still some problems out there that have to be addressed. The Task Force would like to reinforce to the Ministers that environmental quality must be considered when research development decisions are being made and economic policy is being decided upon.

Compensation

We also want to go one stage further. I must lay credit on Wildlife Habitat Canada and some of the other NGOs on the Task Force for developing this idea. We are proposing that the Ministers consider strategies whereby persons or agencies degrading or destroying wildlife habitat must compensate the government for the assessed value of the harm that is imposed. That compensation should then be used to replace or recreate as nearly as possible the original wildlife habitat. If economic development decisions go forward at the expense of wildlife habitat, there must be a mechanism to compensate. We are going to suggest very strongly to the Ministers that they argue persuasively in the jurisdictions that this must be done.

Marketing

Probably the most stimulating address given at the Wildlife Colloquium was by Dr. Peter Pearse. He touched on a lot of potentially controversial issues that a lot of people try to hide under the table. He upbraided wildlife managers across the country for their failure to market wildlife resources adequately in this country. Peter, who has also worked in the water field, knows that anything that is free is taken for granted. He suggested that we must try to place some sort of a value on wildlife, because this would aid conservation in the long term. He suggested that commercialization of wildlife was something that should be considered more seriously in jurisdictions across Canada, and that we should be thinking more of contracting out the management of wildlife resources to the private sector, because government obviously is not capable of doing a very good job in this regard.

These ideas are, in the final analysis, extremely political, and the Task Force had a bit of a problem as to how to deal with them. We decided to bring the ideas to the Ministers' attention, for consideration in their own jurisdictions, but coming at them from a different standpoint. We went across the country and essentially documented the commercial uses of wildlife across the country. We asked people: what is going on? what has been done in the past? what are you currently doing? We now have an anthology of the commercial uses of wildlife across Canada and we are going to table it, for the information of wildlife managers and Ministers across the country, for their consideration and use. I think that it will be useful, because for the first time everything will be together in one document.

The Task Force thought that it could make a contribution in the area of marketing. An essential starting point in marketing is knowing your particular public. The 1981 national survey of the importance of wildlife to Canadians was a great step forward in that regard, and its planned repetition in 1988 should be at least as useful as the original. Because such surveys are an essential building block, the Task Force will be recommending that the Wildlife Ministers place the survey on a 5-year cycle of repetition, starting with the 1988 survey.

These were some of the ideas that came out of the Wildlife Colloquium, and some of the recommendations that are going forward to the Ministers. The Wildlife Colloquium proceedings are available from the Canadian Wildlife Service headquarters in Ottawa.

Update report

CANADIAN CONSERVATION STRATEGY

Arthur Hoole
Director of Wildlife
Government of Manitoba

I am going to focus on the status of the National Task Force on Environment and Economy. Although the work of the task force is certainly related to a Canadian Conservation Strategy, such a strategy does not exist at the present time. The National Task Force on Environment and Economy is looking at that as one of its principal points of concern.

The task force was created by the Canadian Council of Resource and Environment Ministers (CCREM) following its annual meeting in October last year at Banff. This action was in response to the May 1986 visit to Canada of the World Commission on Environment and Development, headed up by the Prime Minister of Norway, Madame Brundtland, and an Ottawa conference on the World Conservation Strategy that was held in Ottawa concurrent with the visit of the World Commission on Environment and Development.

Task-force objectives and activities

The objectives of the task force are as follows:

- to foster and promote environmentally sound economic development, by initiating a broader dialogue on the integration of economic and environmental forces;

- to recommend actions and procedures to integrate environmental considerations into decision-making on economic development;

- to support the development and implementation of conservation strategies; and

- to review the report of the World Commission on Environment and Development, which was released just a short time ago, and to contribute to a Canadian response to that milestone product.

With respect to the last objective, a high-level government and business task force has been established with 17 members: there are six Environment Ministers represented, one Minister of Renewable Resources, the Honourable David Porter of Yukon Territory, seven Chief Executive Officers from industry, two representatives from environmental non-governmental organizations, and one representative of the academic community.

Although I am delivering this update report, the task force is being chaired by the Honourable Gerard Lecuyen, Manitoba Minister of Environment. It is vice-chaired by Mr. Roy Aitken, Executive Vice-President of Inco.

The activities that the task force has undertaken to date include several meetings: one in Winnipeg in February of this year, one in Ottawa in April, and a third planned for Toronto in August. There will be a final report, prepared for the 23 September meeting of CCREM in Quebec City, that will be publicly tabled.

A 25-person secretariat has done all of the background, assembly, and research of material and experience to support the endeavours of the task force. To date, the task force has met essentially privately with industry and government representatives in order to facilitate an open dialogue. Media events have been provided for both prior to and following these meetings. As I noted, the final presentation in September will be a public tabling of the report.

Need for conservation strategies

There has been a focus on the need for conservation strategies, beginning at the site level. We often think in terms of these conservation strategies, probably because of the World Conservation Strategy model, as big and all-encompassing. However, there is a focus on these strategies being needed at the local level and prepared by local people through the regional, provincial, territorial, and, ultimately, national governments. Norma Kassi, Member of the Legislative Assembly for Old Crow, spoke earlier about the work of her people on the preparation of such a strategy in Old Crow. Perhaps the participation of the Honourable David Porter of Yukon Territory in this task force has influenced this focus.

The secretariat has produced a background report for the task force on conservation strategies for Canada, which recaps main elements of the World Conservation Strategy and surveys conservation-strategy activity, jurisdiction by jurisdiction, in Canada, with special emphasis on Alberta, the Yukon, and the North. The strong role of non-governmental organizations is also an expected emphasis in the discussions that have occurred to date.

The recommendations will go much beyond CCREM to any sector that can meaningfully integrate the consideration of environment and economic development. The discussions have apparently been very upbeat, optimistic, and enthusiastic. There has been a real coming together at this senior level of government and industry on the matter of integrating development and environment. Much common ground has been established. I think that this will be a most important product for those of us who are concerned directly with and have direct responsibility for wildlife management in Canada. We should watch the proceedings of this task force and await its September report with anticipation.

In closing, I would like to thank the people and the Government of the Northwest Territories for hosting this conference, and I would especially like to thank the people of Tuktoyaktuk.

Keynote address (1)

WILDLIFE--A REVIEW OF THE PAST AND PRESENT

Richard C. Goulden
Manitoba Wildlife Branch

To set "tomorrow's" agenda, it would seem useful to know what was addressed and accomplished "yesterday" and "today." To assess this would require an exhaustive review of the history of wildlife management in this country. Not possessing either the talent or the fortitude for this task, and assuming that you would probably not appreciate such a recitation during this reception, I attempted to short-circuit the process. I undertook an analysis of the following:

- cumulative index of Federal-Provincial Wildlife Conference proceedings (1922-49)
- Federal-Provincial Wildlife Conference recommendations (1950-86)
- Federal-Provincial Wildlife Conference themes (1974-86)
- National Wildlife Week themes (1964-86)

The product of that analysis, displayed against your theme of "Agenda for Tomorrow," might be termed "Old Frontiers versus New Frontiers."

Review of the past (1922-73)

Analysis of cumulative index of Federal-Provincial Wildlife Conference proceedings, 1922-49

In 1922, the Minister of the Interior invited the principal federal and provincial officials concerned with game management in Canada to meet in Ottawa to discuss problems of common interest. This meeting was the first of a series of similar conferences, originally held about every 2 years, but held annually since 1947. From 1932 to 1945, the conferences took place at somewhat irregular intervals, but their continuity has been maintained since 1922.

Minutes of the proceedings of all of these conferences have been kept by the Canadian Wildlife Service in Ottawa or its predecessors. In 1952, a cumulative index of subjects discussed at Federal-Provincial Wildlife Conferences was published. It was to this cumulative index that I first directed my analysis.

Review and analysis of the 901 index entries in the cumulative index of Federal-Provincial Wildlife Conference proceedings between 1922 and 1949 (first 13 conferences) reveal that discussion centred on the following:

Item	No. of entries	%
Regulation of take of game and fur	425	47
Biological status/survey/research	186	21
Predators and their control	73	8
Administration and conservation in general	68	7
Habitat loss and protection	45	5
Uncontrolled/subsistence use	31	4
Wildlife diseases/parasites	20	2
Pesticides/pollution	17	2
Economic/social value of wildlife	15	2
Crop depredation	12	1
Exotic species	9	1
Total		100

In summary, almost half of all recorded discussions dealt with regulating the take of game and fur; biological status of wildlife commanded over 20% of attention, followed by predator control, administration, habitat concerns, and subsistence use.

Frankly, this surprised me a little. I would have thought that crop depredation and subsistence use would have commanded more attention. However, it is clear that Canada's first wildlife administrators were preoccupied with the status of the resource and ways to control its harvest.

Analysis of Federal-Provincial Wildlife Conference recommendations

Federal-Provincial Wildlife Conference recommendations concerning wildlife research, management, and administration between 1955 and 1973 were reviewed. Analysis revealed that the 131 applicable recommendations could be sorted into the following categories:

Category of recommendations	No.	%
Regulation of take of game and fur	42	32
Communication/public information	18	14
Pesticides/pollution	17	13
Administration and conservation in general	15	11
Economic/social value of wildlife	10	8
Biological status/surveys/research	7	5
Financing wildlife management	7	5
Uncontrolled subsistence use	5	4
Habitat loss and protection	4	3
Rare and endangered wildlife	4	3
Exotic species	3	2
Predators and their control	1	Trace
Wildlife diseases/parasites	-	-
Crop depredation	-	-
Total	133	100

From 1955 to 1973, we saw a decrease in Federal-Provincial Wildlife Conference attention to regulation of the harvest of game and fur, a significant drop in emphasis on biological status/surveys/research, and a drop in concern over predator control. However, not unexpectedly, there was a good deal more emphasis on pesticides/pollution, the economic and social value of wildlife, and the administration of wildlife programs. Moreover, three new categories emerged, these being the financing of wildlife management, communication/public information, and rare/endangered wildlife. Communications and public information emerged as the second most popular issue for recommendations.

Analysis of National Wildlife Week themes

The annual themes of National Wildlife Week were assumed to reflect issues of concern or subjects on the "agenda" of yesterday. Themes from 1964 through 1973 were examined:

Year	Theme
1964	Canada Needs Wildlife Resources: Act Now to Preserve for the Future
1965	Water Pollution
1966	Preservation of Wildlife Habitat
1967	Conservation in Canada: Second Century
1968	Pesticides: Boon or Bane
1969	Land Use Planning: An Ecological Approach
1970	Endangered Wildlife in Canada
1971	Environment for Survival 1972
1972	Conservation Education is Survival Power
1973	Man and Resources

Key issues reflected in National Wildlife Week themes from the mid-1960s to the mid-1970s paralleled those addressed by Federal-Provincial Wildlife Conference recommendations:

- pesticides/pollution
- information/education
- conservation in general
- endangered wildlife

In summary, what we see developing in these two decades from the mid-1950s to the mid-1970s is a decrease in attention on the biology of wildlife and regulation of its use, with concomitant emergence of concern about pesticides, pollution, and the financing and administration of wildlife, and a strong upsurge in concern over our ability to communicate with the public about wildlife. Interestingly, attention devoted to the issue of habitat loss and protection remained almost the same as that of the previous three decades.

Review of the present (1974-86)

Federal-Provincial Wildlife Conference recommendations

Analysis of Federal-Provincial Wildlife Conference recommendations concerning wildlife research, administration, and management between 1974 and 1986 revealed that the 103 applicable recommendations could be sorted into the following categories:

Category of recommendations	No.	%
Administration and conservation in general	24	22
Communication/public information	22	21
Economic/social value of wildlife	11	11
Rare and endangered wildlife	11	11
Habitat loss and protection	10	10
International co-operation	6	6
Integration of wildlife and other resource management	5	5
Regulation of take of game and fur	4	4
Pesticides/pollution	3	3
Biological status/surveys/research	2	2
Financing wildlife management	2	2
Predators and their control	1	1
Uncontrolled subsistence use	1	1
Crop depredation	1	1
Wildlife diseases/parasites	-	-
Exotic species	-	-
Total	103	100

During the past decade, Federal-Provincial Wildlife Conference delegates really began focusing attention upon the administration of wildlife programs, broad conservation issues, and communication with the public, particularly through information and education programming. Along with this was a strong interest in the social and economic value of wildlife, rare and endangered wildlife, and habitat loss and protection. This redirection of emphasis came at the expense of concern about regulating the take of game and fur, pesticides and pollution, the biological status of wildlife (except for endangered species), and the activities of subsistence hunters.

Federal-Provincial Wildlife Conference themes

Since 1974, Federal-Provincial Wildlife Conference agendas have been organized around specific themes:

Year	Theme
1974	People and Wildlife
1975	Wildlife Values
1976	Federal-Provincial Initiatives in Wildlife Management
1977	Wildlife Enforcement
1978	Use of Wildlife
1979	Habitat is the Key
1980	A National Policy on Wildlife
1981	A National Policy on Wildlife--Phase II
1982	Wildlife in Canada's North
1983	Wildlife Management--Today and Tomorrow
1984	Teamwork in Wildlife Management
1985	Communicating About Wildlife
1986	Canada's Role in World Wildlife Conservation

These themes reflect a trend toward acknowledging people in the people-wildlife equation. This shows up in subjects such as enforcement, communications, policy, teamwork, federal-provincial initiatives, use, and values.

National Wildlife Week themes

Over the last 13 years, National Wildlife Week themes were as follows:

Year	Theme
1974	Preservation of Aquatic Wildlife
1975	People and Wildlife
1976	The Value of Wildlife
1977	Wildlife Management in Canada
1978	Wildlife Protection
1979	Endangered Habitat

(Cont'd)

Year	Theme
1980	Wildlife in your Backyard
1981	The Role of Wildlife
1982	How People Live with Wildlife
1983	Wildlife Management
1984	Wetlands and Wildlife
1985	Key to Conservation: Responsible Stewardship
1986	Together we can Help Wildlife

It is clear that since 1922, senior wildlife administrators and advocates across this country have progressively switched their attention away from rules that control harvest of wildlife and biological status of species toward broader-based conservation issues, environmental stewardship, more effective communications with the public, and integration of wildlife into other resource-management initiatives, nationally and internationally. Concern over habitat per se has remained more or less constant according to the indicators from which these conclusions were drawn. However, it would be fair to suggest that several major habitat initiatives have emerged and proceeded without much reference to these in Federal-Provincial Wildlife Conference recommendations and themes or in National Wildlife Week themes, e.g., North American Waterfowl Plan, Wildlife Habitat Canada, and Ducks Unlimited programs.

It is also fair to observe that there have been other forums, such as the Wildlife Colloquium and the Forestry-Wildlife Symposium, which have addressed the issue of habitat loss or degradation.

Nevertheless, with all the advantages of hindsight, if one simply accepts from this analysis the facts at face value, without embroidering qualifiers around their edges, one might be brutal and conclude the following:

(1) We wasted a good deal of time and effort worrying about the rules under which and by whom wildlife is harvested, without seriously addressing the system upon which and by whom it must be sustained.

(2) We then shifted some attention to habitat, but this was mostly rhetoric and hand-wringing rather than imaginative, productive programming. The latter was accomplished by other means.

(3) We grossly underestimated the public's need to know about its wildlife resources and how that public must be mobilized to support wildlife conservation and use.

(4) We wasted too many of our precious intellectual and financial resources on interjurisdictional bickering while the object of our professed concern steadily deteriorated in quantity and quality.

(5) We have stubbornly held to policies and traditions respecting the ownership, administration, allocation, and use of wildlife while circumstances and needs changed sufficiently to render our practices obsolete.

(6) Despite consistent and predictable shortfalls in funding for wildlife programs, until recently little real imagination has been applied to alternative funding arrangements.

So ends the "Old Frontier."

All this is a backdrop against which to consider "current realities."

Current realities

Despite these harsh self-criticisms, there have been some noteworthy advances, including the following:

- guidelines for wildlife policy in Canada
- Wildlife Habitat Canada
- Fur Institute of Canada
- Wildlife Colloquium
- intergovernment/interagency agreements
- native user co-management agreements (Beverly-Kaminuriak caribou)

However, the reality is that:

- the southern Canadian public is not enamoured with hunters or hunting--the public throughout Canada is concerned about environmental quality;
- the public and government want better value for money expended, and the money supply from traditional sources can be expected to contract further;
- program efforts of the nature and scope necessary to do the job will not be possible without the backing of committed public; and
- traditional ownership, management, allocation, and use arrangements will have to be altered and/or replaced if the resource is to survive.

What is stimulating or driving this "new reality?" I submit that it is being driven by guilt, a realization that our western life-style is inherently unsustainable (by itself) and that we should "do something" to offset the impact of our obsession with creature comforts.

If we set this realization in the context of a growing disaffection with conventional wisdom and practice and a growing suspicion of and declining faith in politicians and bureaucracies (for whom most of us work), the stage is now set for a strong national tendency toward "preservation" or "protection." Evidence for this includes the following:

- Decima Research polls (federal)
- Criterion omnibus surveys (Manitoba)
- polls showing people are concerned most about environmental issues, more than jobs, economy, or free trade

Why this trend toward "preservation" and away from consumptive use? I submit it is due to changes in Canadian society:

(1) aging population

  - more conservative
  - reconciling themselves to more sedentary pursuits
  - wanting to leave living wildlife legacy or heritage--believe non-hunting/trapping is way to do it
  - attempting redress of past excesses (e.g., Jack Miner, predator killer; James Audubon, market hunter; former "game hogs" now turned righteous anti-hunters)

(2) changes in ethnic composition of populations

  - different wildlife-management traditions and no-hunting tradition among Asians (boat people), Pakistanis, Indians, Filipinos, Greeks, Italians, Portugese, Malaysians, etc.

(3) influence of women in politics and decision-making

  - women influence youth, politicians, business, etc.
  - in Canada, women have not traditionally been hunters/harvesters

(4) shift in population from rural to urban

  - loss of touch with the land: cycle of life and death
  - loss of mentor--teacher/father who harvests wildlife
  - "concrete canyon ecologists"--vicarious experience

(5) new-age culture

- alternative philosophy
- eastern (Zen) philosophy--mysticism
- alternative medicine

What is causing changes in Canadian society?

(1) influence of television

- e.g., Johnny Carson (Tonight Show, 14 January 1987) poked fun at deer heads on walls

(2) influence of newspapers

- e.g., Letters to Editor--generally anti-hunting and often anti-management, cite hunting (especially "sport" hunting) as unethical, barbaric
- e.g., editorials--generally negative, and we have not deserved much better
- e.g., comics-- "Annie" series from 6 January to 10 January 1987

(3) influence of world trend-setters

- western world centres of influence (London, UK, and S. California, USA)--art, literature, television, movies, clothing
- eastern influence--Canadian wildlife use traditions not traditional in Japan, Asia, Korea, China, Cambodia, India

(4) abhorrence of war and desecration of mankind

- offends sensibilities
- the view is held that since we cannot prevent butchering each other, at least we should not carry this over to wildlife

(5) influence of teachers

- most teachers no longer have a land ethic
- teachers are taught/trained to believe that hunting is not acceptable behaviour

(6) changes in sex, cultural background, and activity pattern of emerging decision-makers

  - women

  - visible minorities

  - native people

  - physically handicapped

Remember that we are not talking about the future here! This is the present--right now. In this idyllic setting of Tuktoyaktuk, all this seems so far away--but you know that it is not.

What does this mean for our "Agenda for Tomorrow?" It means that we must accept the realities of the "new frontier:"

- expect and encourage radically new and different advocacy groups (as outlined by Alvin Toffler in "Previews and Premises")

- experiment with co-management involving special-interest groups: natives, conservation clubs, etc.

- promote (not prohibit) the contracting-out of wildlife management

- facilitate at least limited market intervention into wildlife management

- accept wildlife damage as a cost of production and compensate the sustainer accordingly

- realize that public support must be earned, deserved, and won

- the gaining of public support must be viewed as a primary objective and addressed appropriately, rather than as a desirable but non-essential adjunct

Concluding remarks

(1) Canadian wildlife managers can be adaptable and imaginative if freed from the fetters and constraints imposed by the obsolete policies of narrow-minded bureaucracies, be they public or private. (Examples are legion, although not well publicized.)

(2) Our "Agenda for Tomorrow" is achievable if we lift our vision to the horizon and are not totally preoccupied with traditional methodologies and past practices, but using these only insofar as they are still effective and defensible.

(3) We have been tested in the crucible of financial restraint, public accountability, and professional integrity. Although bruised and bloodied a little, we are leaner, stronger, and sharper. Thus, I believe we have the inherent skill and capacity to meet, head-on, the challenge facing us; to overcome those challenges; and to restore to all Canadians a wildlife heritage worthy of our predecessors' highest ambitions and our successors' eternal appreciation.

In closing, I would challenge you in tackling your "Agenda for Tomorrow" with the words of John F. Kennedy, from a 1961 quote about Theodore Roosevelt who was undoubtedly the greatest politician/conservationist in North America:

> The credit belongs to the man who is actually in the arena, whose face is marred by dust and sweat and blood, who knows the great enthusiasms, the great devotions, and spends himself in a worthy cause; who at best, if he wins, knows the thrills of high achievement, and, if he fails, at least fails daring greatly, so that his place shall never be with those cold and timid souls who know neither victory nor defeat.

Good luck with your "Agenda for Tomorrow."

Keynote address (2)

WILDLIFE CHALLENGES FOR THE FUTURE

Hon. David Porter
Minister of Renewable Resources
Government of the Yukon

I would like to thank Mayor Steen, Councillor Felix Emanuel, and the Honourable Nellie Cournoyea for inviting me and my honourable colleague, Norma Kassi, the Member of the Legislative Assembly for Old Crow, to this community. I would also like to thank the conference delegates and the organizers of the 51st Federal-Provincial/Territorial Wildlife Conference for inviting us to speak to you at this conference. Our Director of Wildlife, Hugh Monaghan, who is no stranger to this part of the world, is also in attendance.

It is an honour for Norma and me to be here. Like the ducks that have congregated in Tuktoyaktuk to replenish their species, we are here to do our own quacking. I hope that the time we spend here will eventually facilitate the making of decisions to allow ducks and geese to continue to return here, replenish themselves, and continue their species.

It seems as if this is also a time of gathering of humans in this part of the North. Norma and I and the Council for Yukon Indians were fortunate to host the 3rd Annual Conference of Indigenous Survival International (ISI) last week. It is an organization that represents indigenous peoples throughout the circumpolar north. These people have clearly articulated their views on management of the environment and resources. I urge all of you that are represented here today, who want to know how aboriginal people feel about the environment and resources, to put next year's meeting of ISI on your agenda. That meeting will take place in Fort Yukon, Alaska, which is a Loucheux community related to the people of Old Crow in the Yukon and to the people of Fort MacPherson.

I would like to thank my department for the massive amount of work it has put into the text of my speech today. I will not be reading that text, but I will extract the major themes from it.

I would like to begin by speaking to the three major themes that flow from the text prepared for me today:

- the need to integrate wildlife-management considerations with the broad socio-economic decision-making processes (i.e., melding economic decisions with conservation principles);
- the need to involve user and interest groups in the management of our wildlife resources; and
- the need to achieve international co-operation in the management of wildlife and other environmental resources.

Integration of conservation and development

Public-opinion polls consistently place preservation of our natural heritage--our environment and the wildlife it sustains--as a top priority for all Canadians. Yet I wonder how many of you, as wildlife professionals, can say that the governments for whom you work or with whom you deal put wildlife or the environment at the top of their priority lists. Somehow, in a complex and competitive world, our wildlife and the environment which we as humans share with that resource often get the short end of the stick. Wildlife concerns have been tucked away in a closet. In some senses, those of us involved in government and wildlife management are still operating according to the assembly-line principles established by Henry Ford over a half century ago: break a system down into its component parts, decide what part goes on when, make one person responsible for each of the components, and let the line roll. In the vehicle of government, wildlife concerns have not been the steering wheel: by and large, they have had the status of an extra spare tire--nice to have along, but not really essential.

In my own jurisdiction, for example, the Department of Renewable Resources has a responsibility for the management of wildlife, but virtually no authority over wildlife habitat, as if one could exist without the other. Somehow, in a society caught up in growth and development, we have managed to discount wildlife and the environment and the natural world on which everything depends. Unfortunately, because environmental considerations have been factored out of economic decisions, conservation is usually seen as being at odds with development. By separating the concepts of conservation and development, we have put ourselves on the horns of a dilemma: we in government are bound to get gored by one tip or the other when we forget that both horns grow out of the same head.

Development depends on the existence of harvestable resources, and the conservation of harvestable resources is essential if development is to continue. That principle, maintenance of harvestable resources at sustainable levels, is one of the components of the World Conservation Strategy. Simply put, wildlife is renewable if conserved and destructible if it is not. Maintenance of ecological processes is a second component of the World Conservation Strategy. Ecological processes make the planet fit for life, sustaining the productivity, adaptability, and capacity for renewal of lands and waters, as Robert and Christine Prescott-Allen put it in the framework document they have drafted for a Yukon Conservation Strategy. Ecological processes ensure the supply of food and habitat for harvested wildlife. Maintenance of biological diversity is the final component of the World Conservation Strategy. Biological diversity provides the building blocks of life and, among other things, allows for regeneration of harvested resources and the maintenance of ecological processes. Adoption of the World Conservation Strategy components by governments in this country, and others around the world, would bring conservation concerns out of the closet and put them on the main stage of socio-economic decision making.

Involvement of user and interest groups

In the Yukon, we are in the process of developing a territorial conservation strategy based on the three basic components I have just outlined. It will form the framework for most of the work and policy development that we expect to do in coming years. The Yukon Conservation Strategy is the Department of Renewable Resources' contribution to the Yukon 2000 process, which is working to achieve consensus on economic-development strategy for the Yukon. The components of the strategy will become a part of the overall economic strategy that will guide the Yukon's economic and social development.

Development of the Yukon Conservation Strategy will also help the Yukon to meet the second challenge which I will address today, and that is the need to involve user and interest groups in the management of wildlife resources. Most responsibility for wildlife management in Canada lies in government hands at present--in the hands of scientists and technicians. We have a public trust to manage the resource as wisely as we can. We have all the tools of our technology and all of our scientific sophistication to bring to bear on the task. Yet I know that there is not a jurisdiction in this country that can claim the same success in wildlife conservation as can the Loucheux community of Old Crow. For 30 000 years, these people of the northern Yukon have lived with their environment and have used their wildlife resources. In my view, it is simply stupid not to involve the aboriginal people in the management of wildlife resources. Centuries of traditional indigenous information should be integrated with our modern scientific approaches. We need to bring the people of the land and the scientists together.

The establishment of the Porcupine Caribou Management Board is one step that we have taken, in conjunction with the Government of the Northwest Territories, to involve aboriginal people in the management of their wildlife resources. I believe that the involvement that government officials from several agencies have had with the board has been mutually beneficial.

Government need not even take the lead role for co-operative wildlife-management schemes to be successful. The involvement of the Canadian Wildlife Federation with the Waterhen Bison Project is a successful case in point. The efforts of organizations such as Ducks Unlimited, Habitat Canada, and the World Wildlife Fund have had positive effects on our environment that may not have occurred had governments been left to make the decisions.

Because the development of a conservation strategy entails public involvement and participation, I anticipate seeing further user and interest-group involvement in wildlife management. The more public involvement there is, the more secure is the future for wildlife. National and sub-national conservation strategies also provide a framework for regional conservation strategies. For the community of Old Crow, which has a spiritual and cultural as well as physical relationship to the land and its resources, a conservation strategy may eventually provide a blueprint for sustainable-resource development and a strategy for social and cultural survival.

Achieving international co-operation

The third challenge that I suggested will confront us is the need to achieve international co-operation in the management of wildlife and other environmental resources. I am sure that many of you are aware of the controversy over the potential oil and gas development in the 1002 lands in the Arctic National Wildlife Refuge in Alaska. It is a good example of the need for international co-operation. The Porcupine caribou herd ranges from the northern Yukon into the northeastern Northwest Territories and into the northwestern north-slope coastal plain of Alaska. The North Yukon National Park was established by Canada and the Inuvialuit in part to protect this resource. The Arctic National Wildlife Refuge seemed to do the same, on the Alaskan side, until a pro-development US Secretary of the Interior prepared an environmental-impact statement that recommended that Congress permit full exploration and development on the 1002 lands. The caribou herd is an international resource, and harvesting of that herd takes place in Alaska, the Yukon, and the Northwest Territories (mostly in the latter two). The 1002 lands are critical to the herd--most of the calving takes place there, and the early lives of the caribou are spent on the windswept coastal plain, free from flies. Damage to the habitat of the caribou on 1002 lands could have crippling effects on the herd. What happens in the US will affect what happens in Canada. Obviously, there is a need for co-operation in a situation like this, and we in the Yukon have been seeking a mechanism for such co-operation.

Last fall, in Seattle, Canada negotiated an international agreement that, while not perfect, would have established an international management board and a set of ground rules for managing the Porcupine caribou herd. The future of that agreement, we learned last week, is now in doubt. Mr. Hodel, the US Secretary of the Interior, is apparently seeking changes to the agreement that will dilute the language. Alaska, the Yukon, and the Porcupine Caribou Management Board, not to mention non-governmental organizations like ISI and the Canadian Wildlife Federation, have spoken out against the proposed changes. Our efforts to encourage retention of wilderness designation for 1002 lands will continue, whether or not there is an international agreement. The Yukon, the Porcupine Caribou Management Board, the Northwest Territories, and Canada are working together with Old Crow to persuade the US Congress that oil and gas development on 1002 lands is not acceptable. Were the US to adopt a national conservation strategy, as countries such as Australia have done, and were Canada to do the same, shared principles of resource development would undoubtedly make international co-operation a great deal easier than it is today.

Conservation strategy in the Yukon

Perhaps I can close by saying this: we in the Yukon may be in a unique and privileged position--in an ideal situation to prepare a conservation strategy. We have experienced limited development, our indigenous cultures are relatively intact, and a conservation strategy developed now could help to ensure that the Yukon will not experience some of the pitfalls of development that have plagued other parts of the globe. The components of a conservation strategy and the process of its development could help us to rise to the challenges that

I have outlined today. But these same challenges face all of you, and the risk of not rising to them are formidable. At no time in history have people been as aware of the beauty and fragility of our global heritage as we are now. At no other time in history has that natural heritage been so threatened. I urge you to rise to meet that challenge.

Keynote address (3)

A NORTHERN-COMMUNITY PERSPECTIVE

Norma Kassi
Member of the Legislative Assembly
Old Crow

I am very pleased to be able to address this conference today and give you a northern-community perspective. My name is Norma Kassi and I am the territorial representative for the Vantat Gwit'chin (people of the lakes) in the Yukon's legislature.

Old Crow is a small village of about 300 aboriginal men, women, children, and elders. It is located below where the Crow River meets the Porcupine River. Ours is an isolated community, the only village in the Yukon Territory that does not have road access. Much like those in Tuktoyaktuk, we too enjoy the long summer days and experience the short days of winter. The Gwit'chin Nation extends throughout the Yukon, the Northwest Territories, and parts of Alaska. We have a language of our own and a strong culture based on the land. We have been a self-determining people for many thousands of years. Over the years we have experienced changes to our culture. Still, the reality remains that a lot depends on our elders, who command much respect and whose direction we must follow. The elders train their children and educate them in traditional ways, especially in conserving the earth and all its resources that are given to us so freely. I am referring to the basics of life that we cannot survive without: the air we breathe, the water we drink, the plants we eat, the sun, and the wildlife.

Old Crow Flats

Our culture thrives, for example, every spring when the village of Old Crow becomes nearly deserted as many families leave to go muskrat trapping, or "ratting" as we call it, in Old Crow Flats. From March until June, we live through a spring of hard work, traditional training, and personal as well as family-unit development. The muskrats we trap are an essential contribution to our yearly income.

This spring I spent a month on the Old Crow Flats, a beautiful place for spiritual development. Beautiful as it may be, a lot of subtle, slow changes have taken place since I was last on the flats: lakes are drying up here and there; our snow water doesn't taste like it used to; small animals, ptarmigans, rabbits, birds, and ducks are not as abundant as they used to be; plants don't grow as well; the behaviour of the caribou has changed, as more airplanes are flying over our camps. My elders speak about these changes often, with concern. We suspect that the changes are the consequences of mass development around us: the effects of nuclear testing, pollution, the influx of more people, and acid rain. We are very concerned--how much more can the land and the wildlife tolerate?

Industrial development

In Old Crow the people believe that our future relies on our renewable resources. We do not exploit non-renewable resources such as oil and gas. Many huge developments have been proposed for our area over the years, such as the Mackenzie Valley pipeline. Our village fears huge developments. I do not believe we need a pipeline, a road, or a port facility on the north coast to give us wage work. For one thing, we have learned that that kind of work is unreliable, as it comes and goes with the price of oil and gas. These large-scale developments, such as the proposed oil and gas developments on the Alaskan north coast, will be devastating for our people who rely heavily on caribou. The caribou is our main source of food, the main essence of our survival: we eat caribou meat three or four times a day.

We will not tolerate any harm to these renewable resources that have sustained my people and our ancestors for many thousands of years. These developments will potentially destroy the habitat of the migratory birds, the polar bears, foxes, grizzly bears, and many other wildlife that inhabit the Alaska coastal plain as well as the north coast of Canada. So far, we in Old Crow have had very little participation in the congressional hearings that are taking place on this very important issue. Our people of Old Crow must be heard, and I ask you for your support.

I want to state at this point that when we address the concept of industrial or modern development in the North, it is with one basic condition in mind, and that is the need for local control. To provide for the long-term management of our resources, my people have decided to build our own local conservation strategy. This strategy will focus on several specific renewable-resource issues of immediate concern, namely water, wood and logs, fish, fur, caribou, waterfowl, and greater control of the northern Yukon parks.

Maintenance of renewable resources

The maintenance of Old Crow's renewable-resource base depends on two factors, maintaining the community's harvest at sustainable levels and limiting external impacts. We can continue to hunt, fish, and trap and still survive. We, the aboriginal people of the North, have skills of conservation. We have powerful traditional laws that we must abide by. If we destroy, then we are destroying ourselves! When we take, we have ways of giving back. If we go out on the land and get a caribou, we give something back--we have our spiritual ties and our traditional ways of doing so. We share with everything. We are part of the natural cycle, and we must live that way to maintain a balance between our needs and the available wildlife resources.

To be successful in the development of a long-term conservation strategy, we require your support. I am asking you, the people who are in charge of these huge wildlife organizations and government departments, to co-operate with my people, as we manage our land and its resources, and to have much more involvement of Canada's aboriginal people in your organizations and levels of government. As the Gwit'chin people, we have hopes and aspirations for the future: that the world will come together to conserve what we have left; and that the cultural and traditional values of the world's people will continue to follow the natural laws.

Furthermore, we believe that our mother earth has had enough destruction and cannot possibly handle much more. The world is trying to deal with nuclear wastes and pollution that have gone beyond our control. We see more and more people suffer, and even we are affected way up here.

In Old Crow we want to take care of what we have left and share it with whomever will respect and do the same. I welcome you to share the future with our people.

Workshop (1)

EXAMINING WILDLIFE VALUES

Summary of Workshop 1 report

John Baird (Rapporteur)
Chief Wildlife Biologist
New Brunswick Fish and Wildlife Branch

Our workshop was on examining wildlife values, which underlie the topics in all the other workshops. Wildlife values listed in the program included ethics, cultural, religious, economic, biological, anti's, social structure of the North, and native hunting rights. We viewed the workshop as more than a simple exercise--we concentrated on substance.

In order to bring some focus into the topic of wildlife values, we felt there were some basic, underlying considerations that we should discuss. The most important were the well-being of the land and resources; the habitat component and the need to maintain it; proper control of harvest so that we do not deplete our resources; the need to meet human needs; and humane use when it comes to utilizing individual animals.

"Values" has a very wide range of meanings. Values are developed from many different perspectives. There are individual values relating to each of the above-mentioned categories: cultural values, economic values, etc. As well, individuals and/or groups have different values and social structures. We concluded that we must recognize and be aware of the different values, ethics, and traditions that we as individuals or groups have.

Concerning use, we do not think it is proper to make judgements of others or to impose a set of values on people who might not share them. We had some discussion on co-operative management, which Workshop 9 is also discussing. We also feel strongly that neutral or popular political positions should not be taken at the expense of legitimate uses, even though the users may not be a large number of people. "Legitimate" means that use is sustainable and humane. We have one very basic and important recommendation. We think that we, as Canadians, should ensure that the values and uses that are legitimate and that we have cherished over the years should continue.

Workshop (2)

ACCOMMODATING DEMANDS FOR WILDLIFE

Summary of Workshop 2 report

Mel Crystal (Rapporteur)
Indian Negotiator
Ontario Ministry of Natural Resources

In Workshop 2, we spent a fair amount of time talking about economics in satisfying wildlife needs. We discussed two approaches to accommodating needs. One approach is the kind of approach that is generally taken in Canada today--that is, setting up a regulatory mechanism and setting priorities through that mechanism. The other approach is to determine an allocation, provide that allocation to a user group, and allow the user group to make its own decisions on how the resource is to be used. If a particular portion of the resource is going to be used in the process, it really should not matter to the resource managers what that use will be. Perhaps the best party to determine the use is the users themselves. We also considered that, by allowing the users to make this decision, the economic value of the wildlife resource would probably be enhanced: rather than having an artificial regulatory force imposed on the resource, the resource would rise to its appropriate economic value. Notwithstanding these economic forces, we also took into consideration the needs of native people with respect to the resource, and one of our recommendations is that, regardless of what regime is set forth for the future, native needs should receive priority in the agenda.

Public consultation

Another thing that we considered was consultation with the public in the process. We thought that government has an obligation to consult with the public on how the public users believe the resource should be used. Nevertheless, it is still important to protect the minority who may not be reflected in the voice of the public when this consultation process takes place. Despite the fact that we want to get a feeling for what the public thinks about resource use and the priorities that perhaps ought to be in place, it is still necessary for governments to consider the needs of the minority.

Bureaucratic possessiveness

Another topic that we discussed was the phenomenon of bureaucrats from time to time having a very possessive outlook on the wildlife in their particular jurisdiction. One of the recommendations that was made is that this bureaucratic possessiveness should be controlled to a great extent and that the desires and needs of the users should be enhanced.

Wildlife-management boards

We looked at the use of wildlife-management boards. That is certainly coming to this part of the country and is a viable means of involving the public in the management process. Also, in this part of the world and in the South as well, we saw unsettled Indian land claims and other native claims to the resource. Certainly in accommodating resource needs, it will be helpful if and when these claims can be settled.

We also looked at the fact that solutions to these competing resource demands can probably best be reached on a site-specific basis. We must take things one step at a time on a case-by-case basis.

Workshop (3)

MANAGING CANADIAN ENDANGERED WILDLIFE

Summary of Workshop 3 report

Art Martell (Facilitator)
Regional Director
Pacific and Yukon Region
Canadian Wildlife Service

In this workshop, we initially looked at the very broad problems involved in the management of Canada's endangered wildlife:

- the threats to wildlife in Canada are continuing;
- there is no single mechanism to address the overall problem in Canada;
- there is no mechanism for co-ordinated action for all endangered wildlife in Canada; and
- the legislative tools to implement action are incomplete.

We then broke these problems down into a matrix as a tool for looking at the question of managing Canada's endangered wildlife and analysing it in a very general way. We felt that the issues really revolved around the following:

- status (determining the status; identifying the status of different populations, species, etc.);
- recovery (once a population has been determined to be threatened or endangered, recovery action is needed); and
- prevention (a key in management of Canadian endangered species is to prevent species from reaching the point at which they are declared to be threatened or endangered).

We looked at the various needs of these categories in a very broad way. We discussed the actions that might be taken, the tools that were available, the deficiencies, strengths, and weaknesses in these tools, and, finally, a public-information component that is integral to the entire picture--the awareness of endangered species and of the manner in which we must manage them has to be better presented than it has been.

The matrix is colour coded. The actions, tools, and information that are in black are the ones that now exist: there are very few of these. The items in green are the ones that are there in part, but are imperfect or incomplete. The items in red are totally absent, indicating actions are in fact needed.

Recommendations

I will now discuss the recommendations that we focused on for dealing with the endangered species.

(1) Our first recommendation was to develop a comprehensive Canadian endangered-species policy. What we mean by this is a national policy or policy guidelines. Obviously, regional, provincial, and territorial policies have to be developed as well, but we need a comprehensive, uniform policy to give some guidance on setting priorities and dealing with peripheral populations, genetic purity, reintroduction, and other related issues. This policy framework is lacking and certainly will inhibit action.

(2) We should encourage legislation to conserve endangered species. At present, such legislation exists only in some provinces.

(3) We should broaden the mandate of the Committee on the Status of Endangered Wildlife in Canada (COSEWIC) to include all species, populations, and what we are calling "super species." I will explain what I mean by a super species. A large, migratory caribou herd functions, we believe, as a super species or unit. We could destroy that unit without actually making caribou themselves, as a species, threatened, but we would lose a great spectacle, an important creation, or a super species. So we think these super species or units need to be addressed as well as the caribou species in Canada by itself.

(4) We are suggesting the creation of a committee to determine the status of ecosystems and habitats. We have looked at species, but we have not looked necessarily at ecosystems or species assemblages. Examine the prairie situation, which the Wild West Program of the World Wildlife Fund addresses. A number of species in the prairies have reached threatened and endangered status. At that point the ecosystem that is now disappearing or virtually gone is addressed. At an earlier stage, those individual species may merely be rare, not even reaching a threatened status, but the assemblage in the community may, in fact, be threatened because it is so restricted within the country. We feel we should address that and look at ecosystems or communities on a broader basis.

(5) We should implement the Recovery of Nationally Endangered Wildlife (RENEW) program that has been discussed by the Federal-Provincial/Territorial Wildlife Directors; it would address the recovery of endangered wildlife, at least terrestrial vertebrates, in Canada. We would encourage Canadian jurisdictions to move forward with implementing this co-ordinated action under RENEW.

(6) We would also like to see the actions under RENEW expanded so that it covers all species. To address fish, we should involve our partners in federal and provincial agencies that deal with fish; the same should occur with other organisms, so that the entire program can eventually be broadened to allow recovery of all endangered wildlife.

(7) We should also create a committee to co-ordinate the conservation of ecosystems. This is a parallel to RENEW. RENEW has its focus on species recovery. We feel we need a different type of approach in dealing with ecosystems and habitat, and we should move actively in this direction.

(8) Our final recommendation is to implement conservation strategies through integrated resource management. This is the broader focusing on endangered species through good land-use planning; through expanding the methods of land-use planning that are there; and through looking at and expanding national wildlife monitoring surveys.

We would contend that the first seven of the eight actions that we have identified and recommended are ones that are largely within the purview of this meeting; we believe that these are achievable and can be addressed within a relatively short time frame. The last action, however, will be more difficult to implement.

Workshop (4)

ENVIRONMENTAL CONTAMINANTS

Summary of Workshop 4 report

Michael Keating (Chairperson)
Environmental Reporter
Globe and Mail

I would like to open by thanking the members of the team--everybody contributed a lot to the discussions. This workshop format is fairly new to me: I am not a wildlife specialist and I have never been a member of these groups in a formal sense, although I have spoken once before. I was quite impressed by the way and speed with which ideas came together for a very small, diverse group of people. Most of our time was spent deciding how we were going to phrase the ideas.

I think that our mandate, that of environmental contaminants, locked us in a little bit. We could have talked for hours about contaminants, but we had to decide on the best way to deal with the problem. We decided to take a very broad approach. We came up with four themes or issues that kept recurring throughout our discussion and discussed what people might feasibly be able to do about them.

Sustainable development

The first issue was sustainable development, which is a theme that has been repeated time and time again by the main speakers at this conference. We see contaminants as a very important problem, but they are not the only problem that wildlife faces. Contaminants management has to be part of an overall management of ecosystems--a sustainable-development approach. Unsustainable forms of development are putting contaminants into the environment, destroying habitat, and creating all sorts of problems for wildlife, humans, the environment, and the biosphere in general.

Who should be asked to deal with this problem? We wanted it to be a national body; we did not want to focus on just one government or to pit governments against one another. We know that the Canadian Council of Resource and Environment Ministers (CCREM) created the National Task Force on Environment and Economy. The task force is reporting to the Ministers in September, as part of Canada's position to the United Nations in October on the Brundtland Report on sustainable development for the globe. I understand that the task force will recommend a permanent or semi-permanent body to follow up, because it dissolves at the end of its mandate and because the members feel there needs to be a continuing public debate, education, and advisory capacity to this country. We suggested that this body ask CCREM to request the First Ministers of Canada to create a national panel on sustainable development--national in the sense that it is supragovernmental. It would include people from all governments as well as people from outside, similar to the way in which the National Task Force on Environment and Economy was created: it is not perfect, but it has representatives from industry, non-governmental groups, and academia. Many other groups could also be involved; for example, native groups should be involved as they are very keen on sustainable development, and labour might also be interested.

National information system

The second issue we discussed was frustration about information. People who are expert in the field of contaminants stated that they were having trouble getting information from colleagues in other departments within their own government as well as from other governments. Sometimes there is a reluctance to share information because of crisis situations. There is no easy, free flow of information about contaminants to assist us to easily, systematically, and regularly make intelligent decisions, even though the information very often exists. Our recommendation is, addressed to CCREM, to create a national information system on contaminants that affect wildlife (at least to start with). We noted (this came from Dave Olsen from Alaska) that in the United States there is an office of information transfer that to a degree does this task now. It could be a model for us; it could also be a linkage, if Canada were to decide to create this kind of national information system, a permanent body with input from wildlife people right across the country. We have lots of information that needs to be pulled together so people can get it when they need it.

Environmental education

The third issue is again about information, but in the sense of education. There is a feeling that there is inadequate understanding among the public in general, particularly among young people, about environmental issues. The public is not educated well enough or in a sophisticated enough manner. The recommendation is again addressed to CCREM, and it is phrased to encourage and assist in the development and improvement of curricula for environmental education across Canada. We debated whether or not CCREM should be asked to address the Council of Ministers of Education in Canada directly, and we decided not to make a specific recommendation. It could be decided later whether we want to operate on a secretariat-to-secretariat basis or whether we simply want to, as a body or as a wildlife community, provide and develop information and invite the provinces and territories to make use of it, either directly or through their own councils.

Educating the news media

The fourth theme again involves information, this time dealing with the news media. Interestingly enough, it was one of the most difficult issues for us to deal with. We were asking, how do you deal with the news media if you are not satisfied with the message you are getting across or if you feel it is incomplete? We suggested that the wildlife community, including governments and non-governmental groups, needs to do a better job of educating the news media on environmental issues and developing long-term contacts with the news media on a continuing basis, not just in crisis situations, because by then it is too late: if it is a complex, sophisticated issue and we have a deadline in 2 h, we must understand it quickly.

Workshop (5)

NATIONAL AND INTERNATIONAL CO-OPERATIVE AGREEMENTS

Summary of Workshop 5 report

Hugh Monaghan (Rapporteur)
Director
Fish and Wildlife Branch
Government of the Yukon Territory

Our focus was national and international agreements. The items that were listed for our review were the North American Waterfowl Management Plan (NAWMP), the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES), the Ramsar Convention on Wetlands of International Importance, and the international Agreement on the Conservation of Polar Bears. The Canada Wildlife Act was also listed, but the group set it aside because it is not used primarily as an instrument for international agreements. We added to the list the Migratory Birds Convention and a future protocol to amend it, as well as the draft Canada-US Agreement on the Conservation of the Porcupine Caribou Herd.

Our approach in reviewing each of these agreements was to comment specifically on the adequacy of the agreement, draw conclusions on the relevance of the agreements, and, where appropriate, determine if there are lessons to be learned in negotiating future agreements.

NAWMP

The North American Waterfowl Management Plan is of clear benefit in providing an overall continental strategy for the management of waterfowl populations in North America. The plan includes the identification of priorities and targets on specific problems. Operational plans are being developed within this frame. The plan was referred to as second only in importance to the Migratory Birds Convention itself. Comment was also made that NAWMP is probably a natural extension of the Migratory Birds Convention, to refine the focus and provide co-ordination for population planning. However, sufficient funding must be secured to enable the full benefits of NAWMP to be realized through implementation of operational plans. Funding is beginning to be obtained, but continued gains in funding are essential to the plan so it can produce the results necessary to meet our objectives for the management of continental waterfowl populations.

In general, NAWMP is a positive example of modern interjurisdictional agreements, which are drafted to include dynamic structures, processes, and guidelines for the co-ordinated development and implementation of flexible management plans for species populations. This is an improvement over the approach taken earlier with treaties, such as the Migratory Birds Convention, which had more of a legislative formatting and were accordingly inherently rigid. This change to a more flexible and dynamic approach is a positive change to the administration of agreements, enabling the ongoing incorporation of new knowledge and response to new conditions.

Migratory Birds Convention

The Migratory Birds Convention (1916) was created to protect migratory birds. It has been an effective conservation tool over the past 70 years. However, binding restrictions of seasons in the treaty have led to inequity in the allocation of the legal harvest in northern areas. Successful negotiation of a protocol to amend the treaty is necessary to correct this allocative inequity. The protocol should be complemented with a statement of intent regarding its implementation. The key lesson to be learned from this treaty is that we must make sure in such future treaties that we can accommodate our developing understanding of species-management considerations, and, to be able to respond to changing social conditions, it is important that agreements be struck in a manner that they are sufficiently flexible to enable appropriate management responses in the future to optimize benefits for all concerned.

CITES

The original intent of the Convention on International Trade in Endangered Species of Wild Fauna and Flora was to control trade only in species specifically endangered by international trade. The administration of the convention has gone astray, and the convention is being misused. Several difficulties have arisen with the ongoing implementation of the convention, with the net result that it does not yield any substantive conservation benefits for North American species, but it does induce considerable inefficiency and costs to the administration of wildlife-management programs in North America. Further, the difficulties with this convention cause suspicion of international agreements and bring disrepute to conservation agreements in general. Despite these serious difficulties, there have been some benefits to the conservation of endangered species beyond North America. The present difficulties with the administration of the convention must be resolved, otherwise these difficulties could lead to the withdrawal of a number of key countries from the convention.

Ramsar Convention

The Ramsar Convention on Wetlands of International Importance, which identifies and promotes the conservation of wetlands, is not legally binding, but it does have considerable effect through political mechanisms. Specifically, it has considerable embarrassment value. The convention often acts in a complementary fashion with other conservation measures. There are also particular benefits from this convention in countries that do not have other tools to identify and implement protection of conservation areas. The convention is also positive because of its hemispheric and world-scale focus. (For example, this focus has particular relevance for our concern about uncontrolled, widespread ecological change that is occurring in South America.) We support the new direction to enhance socio-economic values of designated wetlands and recommend strengthening exchange of technical knowledge on wetland management.

Agreement on the Conservation of Polar Bears

The Agreement on the Conservation of Polar Bears has been a very effective tool to encourage the circumpolar conservation of polar bears by the five nations involved. In particular, the respective national polar bear conservation programs spring from closely co-ordinated and advancing research programs. The recent strong involvement of "user" representatives (i.e., polar bear harvesters) has been particularly important in enabling the implementation of effective polar bear management programs by each nation in which bears are harvested. However, the subsequent enactment of the US Marine Mammals Protection Act is an example whereby a specific legislative tool in one nation has neutered the advancement of polar bear management programs in that area, with the effect that the management practices in Alaska may be in conflict with the international agreement. We urge resolution of the situation so that bear products taken legally in Canada may be imported into the United States.

Canada-US Agreement on the Conservation of the Porcupine Caribou Herd

The draft Canada-US Agreement on the Conservation of the Porcupine Caribou Herd is intended to provide for the co-ordinated conservation of the herd and its habitat. The agreement highlights the formation of an international board to implement the agreement, with strong participation on the board of "users" with management agencies. The agreement requires notice be given to other parties of any domestic action that could affect the shared caribou herd or access to it by users, and board recommendations must be given serious consideration by the respective governments. The future success of the agreement will depend on the technical credibility of the board's recommendations. We think that this agreement has great potential in its current form, and we do urge both nations to get on with finalizing it to enable its implementation and thereby the co-ordinated conservation of the caribou herd.

Workshop (6)

PIECING TOGETHER THE ECONOMIC PICTURE

Summary of Workshop 6 report

George Finney (Rapporteur)
Regional Director
Atlantic Region
Canadian Wildlife Service

Our workshop deals with piecing together the economic picture. We have had a highly focused, constructive discussion on the issue, and with Nellie Cournoyea as our Chairperson there has been a certain focus on the area where our conference is being held. We have a number of general conclusions and some more specific conclusions related to various aspects of the economics as they relate to wildlife, in such areas as game ranching, trapping, and hunting.

Economic data

First, we came to the general conclusion that good economic data on all wildlife-related activities are essential if we are to be successful in maintaining wildlife and their habitats. This pertains to rather narrow objectives within bureaucracies, i.e., preserving wildlife budgets, program planning, and influencing other government departments.

The data generated also have many other uses, but must be used carefully--economic data can easily be misused. Many of us in the business, in particular the native people, have been challenged to put a value, for example, on a goose, so that it can be compared with the value of a pipeline going through: if $500 for a goose is put up against a $500 000 pipeline, it is obvious that you will get rid of the goose.

We noted that data are needed at various levels of aggregation. For example, good national data on the value of wetlands will have little bearing on whether a municipality drains a local marsh. We also noted that in considering economic values of wildlife and their habitat, we must look at economic potential as well as realize economic values at present.

Need for biological data

The second general conclusion we reached was that there is an increasing need for sound biological data to support management actions. This was largely stated in the framework of increasing accountability for our actions. Here we are referring to various elements of society, such as the animal-rights movement, which are increasingly challenging the data on which we base our management decisions. This action, of course, will have an economic cost, but we feel it is necessary in order to maintain the economic benefits associated with wildlife.

Informed public

A third general conclusion relates to the necessity of having an informed public that understands the issues we are dealing with, so that the economic benefits that we have now or that we hope to attain will obtain general support of the public.

Game ranching

We concluded that there is some opportunity in the area of game ranching for our continuing and, in fact, enhancing the economic activity, but it has to be very carefully implemented. Obviously, economic viability is a key factor. One must consider not only the viability of the operation that is proposed, but also the impact of that operation on other operations in place. We also, in the matter of game ranching, must be very concerned about ecological impacts, particularly from escapees.

Trapping

Trapping is currently an industry that is generally viewed in Canada to be under stress--there are threats to the market. We noted that, as important as trapping is to the economy of communities and families, its greatest importance is in its cultural and sociological importance. We also felt that, in terms of promotion of continuation of trapping abroad, we should focus on its importance to life-style and culture, particularly of native people, rather than the economic values, which we feel would prove unsuccessful as a promotional approach.

Hunting

We considered hunting in three general areas. The first relates to recreation/subsistence hunting. Again, in many respects, the most important values of hunting are not economic but rather are social and cultural--even in the South, but particularly and more obviously in the North. But there are very important economic benefits and impacts as well. We noted that maintaining wildlife populations at sufficient levels to promote quality hunting opportunities also creates additional spin-off economic opportunities. We also discussed a debate, particularly in southern Canada, on whether landowners should be allowed by governments to charge for access to their land for hunting purposes. We noted that in order for us to expect a landowner to maintain wildlife populations, perhaps at expense to crops on his lands, for example, we are going to have to be able to provide him with some economic incentive to do so. We feel, therefore, that we should probably be moving towards a position where we do allow some kind of fee to be made available to landowners for allowing access to their lands.

In the areas of tourism and outfitting, we noted that for a single day of recreational opportunity, the guy that is likely willing to pay most is the trophy hunter or the outfitted hunter. However, the growth area in the business of outfitting is probably related to non-consumptive wildlife use, and this is the area where communities and individuals should be looking for the greatest opportunity for additional economic benefits.

Finally, in this context, we noted that we have fairly traditional approaches to marketing wildlife in terms of economic opportunity, and we should be constantly looking at new ways of packaging wildlife activities so that we can realize a greater economic opportunity.

Workshop (7)

NEW APPROACHES AND INITIATIVES FOR WILDLIFE SUPPORT

Summary of Workshop 7 report

Barry Turner
Member of Parliament
Ottawa-Carleton
Government of Canada

The following presentation is designed to add some colourful lightness to a long week of meetings.

Steve Curtis: Ladies and gentlemen, I would like to introduce the host of today's show, Bob Barker of the North.

Barry Turner: Thank you, Steve, and welcome to our show, live from Tuk, the Great White North. Now you all know that there is not much news up here, but do you know what happened in Ottawa yesterday? Juan Val Dez buzzed the top of the Peace Tower in his Cessna 182 and landed on the front lawn. And do you know what the headlines were today in the Ottawa Citizen? "Juan Flew Over the Cuckoo's Nest." Do you know Tony Clarke? Tony Clarke used to work for the Ministry of Natural Resources in Ontario. Do you know he left there because of illness? They got sick of him and he got sick of them.

Okay, here we are, Workshop 7, lucky number 7, and we are the money makers, because we've got to find the money to pay for all the recommendations that we have been hearing over the years. So let's get on with the show.

As you all know, ladies and gentlemen, life up here in Canada's North is very healthy and very colourful. However, we've got to take some tough shots up here in this great outdoor life. As you all know, the best place to get "bucks" is on the Price is Right--Win with Wildlife. Now we are going to get on with our first contestant, who is Joe Bryant from Alta Vista, Ottawa. Joe, come on down here!

Joe Bryant: You want money? You want money to do things with, special revenues, something above and beyond your budgets? Let's get into the excise-tax business. Mr. Barker will tell you how. Conservation bonds: raise a billion bucks for wildlife in about 10 years, spend it on all your long-term capital projects, don't dip into your current revenues for your cap. User fees: we are not talking just about user fees for hunters and trappers and fishermen, but user fees for housing developers who use wildlife habitat to put up their houses. Mining, pipelines, and highways--they are all using wildlife habitat, so let's charge them user fees.

There are lots of people who would love to donate a bit to wildlife, if they only knew how. Almost everybody pays taxes--the very wealthy apparently don't, but most of the rest of us do--so give them an opportunity to check off 100 bucks or 10 bucks on their income-tax returns, and let's see that money go into the non-governmental organizations that are struggling hard to do good things for wildlife. And last, but not least, let's move some of those huge lottery profits of the provincial governments into something really worthwhile for wildlife.

Barry Turner: Thank you, Joe. Remember, Joe, the rich might not be paying taxes today, but tax reform is coming tomorrow. Our second contestant is Dave Phillips from Regina, Saskatchewan, which is near Moose Jaw. Dave, come on down here!

Dave Phillips: Thanks, Bob. I'm really excited to be here with you today. In terms of local and corporate sponsorship, we think that we have to build a very local clientele to both demonstrate the benefits of wildlife arising in the community and enlist a strong local commitment in sustaining that full benefit. That will mean adapting some of the fund raising and projects to very local priorities, but with the ideas that Joe Bryant presented on keeping the core budgets free from the new special endeavours, there should be room for that kind of initiative. Thanks, Bob.

Barry Turner: Alright, Dave, thank you. Our third contestant, before we have a commercial break, is Monsieur Gilles Barras, de la ville de Québec, Québec, Canada. Gilles, bienvenue à notre programme cet après-midi!

Gilles Barras: It seems to me that we could be making much greater use of different kinds of taxes, such as personal and corporate income taxes. The tax system offers vast, selective, and flexible opportunities for raising funds. For example, there's the possibility of giving tax rebates to individuals and corporations that contribute funds or take action to help wildlife, and also of providing incentives for voluntary contributions by individuals and corporations to be used for wildlife projects. We could also make better use of tax exemptions for wildlife-related activities. Related to all of this is the possibility of raising new funds, by means of fees, licences, and permits, to be used for specific projects.

Barry Turner: Thank you, Gilles. We will now have a brief message from one of our sponsors, a true champion. The true champion is the Supreme Court of Canada and the Charter of Rights and Freedoms for all Canadian wildlife. This week our Justices in the Supreme Court have been dealing with the deadly Sikh connection to Air India, and the Mafia are on trial in Montreal; that is some "wild life," as we all know.

Now, we are going to get back to our program. Our fourth contestant this afternoon is a wonderful young lady who has come all the way to Tuk from Sandy Hill in Ottawa--Colleen Hyslop, a true capitalist. Welcome, Colleen!

Colleen Hyslop: Thanks, Bob. We think another important way to raise funds for wildlife is through the stimulation of local manufacturing of wildlife-related products. A lot of people go out fishing and hunting, and we can probably make or assemble a lot of the products that they need right here in Canada. Another way is through marketing art objects such as designer binocular cases. We think there is a lot of potential in those sorts of local industries. Thank you.

Barry Turner: Thank you, Colleen, and have a safe trip home. Our fifth and last contestant this afternoon, ladies and gentlemen, is Steve Curtis, from the bustling metropolis of Greely, Ontario. Steve, welcome!

Steve Curtis: Pleasure to be here, Bob. Well, Bob, we think that better policy integration is an excellent approach. Currently, governments spend a great deal of money on various programs, specifically targeted to one sector or another, and the truism is that many of these programs are in conflict with one another. Witness such things as the Canadian Wheat Board quotas, which have a very negative effect on wetlands and waterfowl habitat in the prairie part of this country. The conflicts exist between levels of government, but probably more prominently within governments, between departments within the provincial governments, and between departments within the federal government. Thank you.

Barry Turner: Oh, thank you, Steve. Well, ladies and gentlemen, our fifty-first show is coming to an end. We had a great time. We hope you all enjoyed yourselves, but remember, as you all know, there are a few danger signals on the horizon for our wildlife--on the land, in our waters, and in the air. However, as you all know, this is Mulroney's third year, and we hope it is going to be the best one yet, so stay tuned to dial 44 in Tuk. Our next show will be coming to you in 1988 from Victoria, British Columbia. Thank you, Cathy (my lovely assistant), Joe, Dave, Gilles, Colleen, and Steve. Goodbye and good night.

Workshop (8)

ECOLOGICAL RESERVES OR THE REFUGE APPROACH

Summary of Workshop 8 report

Jim Walker (Rapporteur)
Director
BC Wildlife Branch

In this workshop we were to deal with ecological reserves, defined as "areas that are visible examples of natural or modified ecosystems protected by law, or by dedicated ownership, for heritage values and their suitability for research, monitoring and environmental education." We discussed the history of these reserves and noted that their precursors were probably the refuge systems established in the United States in the 1960s and earlier. After some discussion on the question of ecological reserves and refuges, we decided to broaden our approach and try to explore the role of any type of designated area, such as refuges, reserves, or wildlife-management areas, in the total picture of wildlife management in the country.

Uses of ecological reserves

We defined the various uses of these ecological reserves or dedicated areas:

- the protection of endangered species or unique features;
- for scientific benchmarks, i.e., areas against which one can measure habitat alterations;
- for educational purposes for the public, i.e., "show and tell" areas; and
- to protect critical habitat.

We noted, for example, that in spite of all we know about wildlife management at the present time, there are some species, such as large predators, for which the only real management strategy is to dedicate large areas to them and leave them alone. So these areas do have a potential as a tool in the total wildlife-management strategy, but their potential is quite limited.

Problems with ecological reserves

There are a number of problems with such areas. First, there are examples in which an agency is left an area in a bequest or a donation and hangs onto it, simply because wildlife agencies are always so poor they will take anything. Very seldom are any areas ever given back, and even areas that are low in wildlife value are held onto. Secondly, there is a refusal to consider, in many cases, any other uses of these areas, if they are under a wildlife jurisdiction. We criticize other people for single use, but we are probably some of the biggest proponents of it. In addition, there is generally no follow-up monitoring or research, simply because we do not have the dollars. There is a failure to communicate to the public why we have set some of these areas aside and what we are doing there when the public drives by them.

The biggest failing in the past has been the lack of any kind of strategy as to why we are acquiring these areas. It has been largely ad hoc. If an area becomes available that looks like a good piece of wildlife habitat and is affordable, we buy it. That is about as elegant as any of the land-acquisition strategies ever get in some of the provinces, and I think probably right across the country. Our committee came to the conclusion that it was questionable whether setting aside these areas in the same way as they had been set aside in the past was all that effective in delivering the wildlife-management objectives of this country, province by province.

Recommendations

To correct some of these shortcomings, we have some recommendations which I would like to share with you.

(1) In each jurisdiction where acquisition or designation of land is part of the management strategy, a committee should be established consisting of each agency that is so engaged, such as the Wildlife Branch, Ducks Unlimited, and Nature Trust. The purpose of this committee would be to develop a strategic plan for the acquisition of designated lands to ensure that all the agencies' actions are complementary, that activities are not being duplicated, and that each agency's actions are part of an agreed-upon provincial strategy, so everyone knows where their land-acquisition dollars are going and why we are designating a certain area.

(2) The appropriate agency should develop a management plan for each designated area, to ensure that the proper fiscal and other resources are available and committed over time to carry out the intended management programs. I know there are all kinds of areas designated in British Columbia, but we do not have any money to do anything on them, so they simply sit there.

(3) A total review should be made of such designated areas about every 5 or 10 years, perhaps by the above-mentioned committee or by consultants, to assess the value of the land to wildlife and the success of the intended strategy. If we find out that the management value is no longer there, then we should attempt to dispose of these areas.

(4) Although it may not be politically acceptable or economically desirable in some circles, we are going to have to give more consideration in the future to designating large tracts of land to protect species such as large predators that do not tolerate disturbance. It is the only "management game" in town for some of the species.

(5) A consistent failing of the management of designated areas across this country in the past has been a lack of adequate communication and public relations to inform the public of the significance of an area, why we acquired it in the first place, and what we are going to do with it. More thought has to be given to the promotion and signing of such areas to generate public interest and support.

Finally, our workshop reiterates that although designation and acquisitions of reserve and refuge areas are valuable tools in the total wildlife-management strategy, most effort in future must continue to be directed toward improving the management of wildlife on crown and public lands--that is the bottom line.

Our workshop would like to make the observation that, with reference to the south of Canada, one of the biggest problems has been convincing the urban people of the value of wildlife. Because of the high native population up north, there does not seem to be the same problem here; that might be the biggest critical factor in ensuring that what is done up here in future with wildlife management will be better than the track record so far in southern Canada.

Workshop (9)

PARTICIPATION IN RESOLVING ISSUES

Workshop 9 Chairperson's comments

Peter Pearse
Professor of Forestry and Economics
University of British Columbia

Let me just say a few words about the approach that Workshop 9 took. Our workshop is on participation, and we defined that broadly to relate to public participation as well as the participation of users, advisors, and licensees in the use of wildlife resources.

We decided to take a broad view of this issue. We started by trying to speculate about where we were likely to be two or three decades from now in terms of wildlife-management needs in Canada, and what would be required of wildlife managers in that new context and changed pattern of demands. We also talked about where we would like to be and what we could do to influence that and to improve matters, especially through public participation, involvement, and co-operation.

We spent some time talking about the various forms of public participation and co-operation, ranging from the very tentative public-information type of activity right through to privatization, where management is turned over to others. Within that range, there is a level of activities that fall under the heading of consultation with users and others. There are advisory boards; there are co-management arrangements, which involve a certain amount of co-operative arrangements with users; there are arrangements for delegating responsibilities through formal licensing and management licensing and that sort of thing. Then, of course, there is privatization, which means turning over title. We decided not to spend too much time on the latter, because it seems to be a non-starter in Canada. However, we spent a good deal of time talking about techniques of improving public information, co-operation, and co-management arrangements.

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Summary of Workshop 9 report

Arthur Hoole (Rapporteur)
Director
Manitoba Wildlife Branch

Before focusing on participation, our group examined the past and the present as a basis for looking 20-30 years ahead. We looked at some key principles that have characterized North American wildlife management to date:

- public ownership
- common-property concepts
- the prohibition of marketing of wildlife products
- the restriction of private management

The summation of this picture in North America and Canada, in particular, is that those residual wildlife populations that we enjoy and utilize today are currently being managed by public agencies for individual use. These arrangements are essentially uniform across the country. We challenged ourselves to consider the suitability of these principles in the decades ahead--in a modern, highly technological, industrialized society. We debated this at some length and reached a consensus that we have to make some movement away from these traditional principles and diversify management and participation approaches, especially in those areas of the country where there are intensive competitive pressures on the resource base, on habitat, and on wildlife populations. We also reached a consensus that there had to be a strong effort in experimenting in management, and we discussed at length an example in Quebec, the Grand Caspedia Salmon Fishery, where a local authority has essentially been set up to manage the data, the harvesting, and the revenue from salmon. We agreed that you could add new dimensions to wildlife management without taking away from or abandoning those established opportunities and principles.

The future

With that backdrop, we started to focus on the future, and we identified some trends that we feel wildlife managers and researchers will have to deal with. There is a growing trend for so-called non-consumptive uses--it is here today and will mushroom tomorrow. We believe native subsistence uses will at least remain a stable requirement and must, therefore, be addressed. We feel that traditional sport or recreational hunting is on the decline and is likely to remain so--that is not necessarily a statement of preferred objective, but rather a statement of some reality that we will have to deal with. There may be growth in the specialty-hunting opportunities of the European-type tradition in those intensive areas of resource competition, where impacts are being most greatly felt on the landscape. We expect there will also be some growth in the commercialization of wildlife, economic evaluation of wildlife, and derivation of wildlife products.

To meet these challenges and needs, habitat protection will be essential. The building of constituencies of public support is fundamental. A variety of management systems surfaces again. Some recognition and realization of the economic value of wildlife will be important.

Participation ladder

We framed the participation focus by considering the range or ladder of participation: from that which can be characterized as public information, to formal, consultative, two-way processes (formulating alternatives, policy recommendations, strategy options), to advisory councils set up to advise governments, to co-management approaches, through to the other end of the spectrum--the delegation of management authority and privatization of wildlife management.

With that as a backdrop, we set about the task of establishing what we felt would be the priorities--the priorities for participation within the range and, then, the priorities within those models--for attention.

Public information

Public information emerged as a fundamental area of priority. We identified the need to establish target audiences and suggested that the main ones are schoolchildren and teachers (the delivery of sound information to the next generation to foster support for management endeavours to come); wildlife users; and conflicting users of the habitat. For schoolchildren and teachers, we suggested that the needs were to develop a general appreciation for wildlife values, environment, and ecological approaches to management needs; for wildlife users, an understanding of access rights and an appreciation of the values of others who utilize the wildlife resource; and, in the area of competition and conflict in use of landscape and habitat, an understanding of the needs of wildlife itself and the benefits that can be derived from wildlife.

There is a footnote to this area of public information: a general need to take advantage of new "media of communication." For example, there is a need to move beyond a dependency on the print medium and the information overload that that represents, and to embrace video and visual means of communication.

Co-management

The second most important area of priority that we felt would have to be moved on was co-management. We recognize two levels: informal mechanisms, which require good information sharing and understanding of need, persuasion, incentives, responsive administration, support, and organization; and formal arrangements, such as wetlands agreements with Ducks Unlimited and management boards for sustaining and enhancing moose populations, where legal provisions and understandings have to be put in place and where there must be political will and commitment, financial incentives, and support resources.

Delegation of management authority

In the area of delegation of management authority, we recognized an informal level at which there would be private participation or local community participation in management and allocation of resources (e.g., aspects of northern polar bear management, sharing of that resource, and muskox management). Needs to sustain and succeed in that type of model include a clear definition of the users and the management units, to focus interest and political will.

On the formal side of the delegation of management authority, we looked at the need for licensing private and commercial users; experimentation with game farming; and assigning total responsibility and authority to community-based operations. The requirements here include experimenting with different licensing forms, realizing financial benefits, and providing financial incentives.

As a general footnote to the area of delegation of management authority, a need was identified for inter- and intra-governmental co-operation and experience sharing. We have seen examples where different jurisdictions are moving into game ranching in quite different ways. We should be using opportunities like this to share our experience and develop common experimental approaches if we want to build public understanding and support and realize benefits.

Consultative approach

The last area of emphasis is the consultative type of approach--the classic public meeting/workshop consultative approach in preparing management proposals or directions. These will still have their place, but do not, in our judgement, have the priority of some of the earlier areas I have referenced. We feel that formal situations (the advisory body) have to be looked at very closely with respect to their effectiveness and value. They tend to be, in our judgement, vehicles that delay decision making. If they are going to function at all effectively, they have to have some independence and clear terms of reference. The highest priority we see in this area of consultation is having specific-resource consultative groups, where there is a representation of a clear constituency and a mutual confidence among managers and local resource groups.

Privatization

We touched briefly on the area of privatization and suggested that it was an area that did not enjoy a great deal of political support. There did not appear to be a great need for it in the future because of strong movement in the areas of delegation of management approaches and co-management efforts. We have basically avoided the suggestion for a move into privatization of wildlife management in any major sense.

Summary of recommendations

In summary, our recommendations are as follows:

- that the principle of public involvement must be embraced as an essential element of future wildlife management;

- that experimentation with co-management approaches and delegation of management authority should receive high priority in wildlife policy;

- that full advantage should be taken of modern forms of communication and media coverage to improve public appreciation, in the first instance, and promote effective involvement in management, in the second; and

- (lastly and perhaps a little bit removed from the area of participation directly) that priority should be placed on applying advanced systems (e.g., Landsat) for assessing the environmental impact of development projects, especially in such regions as northern Canada--this was considered essential to building the database or information base for effective involvement by managers and local peoples in this vast region.

Workshop report (1)

INTRODUCTION

The 51st Federal-Provincial/Territorial Wildlife Conference devoted a day and a half to nine concurrent workshop sessions. These sessions were intended to help develop the information needed to prepare a document for future wildlife planning and management in Canada, to be entitled "Wildlife: Agenda for Tomorrow." This document will be a follow-up to the "Guidelines for Wildlife Policy in Canada" document developed by a committee of the Federal-Provincial Wildlife Conference between 1980 and 1982.

Topics selected for the workshop sessions were as follows:

- Workshop 1: Examining Wildlife Values
- Workshop 2: Accommodating Demands for Wildlife
- Workshop 3: Managing Canadian Endangered Wildlife
- Workshop 4: Environmental Contaminants
- Workshop 5: National and International Co-operative Agreements
- Workshop 6: Piecing Together the Economic Picture
- Workshop 7: New Approaches and Initiatives for Wildlife Support
- Workshop 8: Ecological Reserves or the Refuge Approach
- Workshop 9: Participation in Resolving Issues

Each workshop had an identified chairperson, rapporteur, and facilitator. The chairperson was responsible for directing the workshop, the facilitator for recording the discussion, and the rapporteur for reporting the workshop proceedings to the plenary session following conclusion of the workshop sessions. Results of the workshops were also presented on flipcharts, and the flipcharts and rapporteurs' summarized remarks were used to prepare the workshop reports presented below.

Workshop report (2)

WORKSHOP 1--EXAMINING WILDLIFE VALUES

Chairperson:	Roger Allen COPE President, Inuvik, NWT
Rapporteur:	John Baird Chief Wildlife Biologist New Brunswick Fish and Wildlife Branch
Facilitator:	Kirk Smith Executive Director, Fur Institute of Canada
Members:	Nancy Doubleday Mike Drescher Donald Eldridge Peter Ernerk Bob Gardiner Craig Harper Brian Roberts

This workshop group examined the different values that affect wildlife use and management in Canada. Eight factors were identified: ethics, culture, religion, economics, biology of the species under consideration, anti-wildlife sentiment, the social structure in northern Canada, and native hunting rights. The group concluded that the factors that influence how wildlife is valued are determined by a number of basic premises, including the importance of the well-being of the land, the need for a suitable habitat base, the need for controlled harvests, human needs, and animal rights (i.e., humane trapping).

The values of individuals and groups often differ substantially, depending on social and cultural considerations, as well as spiritual and religious traditions. Important to any discussion of values is a recognition of the differences in values among groups and individuals.

The group concluded that in order to better manage wildlife, interested groups and/or individuals should participate in all activities affecting wildlife, from data collection through to management decision-making. If the values of different groups or individuals are consistent with the basic premises previously identified, then neutral or popular political positions should result in legitimate use (defined as sustainable and humane use of wildlife). The group recommended that society maintain those wildlife values and uses that are legitimate.

WORKSHOP 2--ACCOMMODATING DEMANDS FOR WILDLIFE

Chairperson:	James Bourque Deputy Minister, Department of Renewable Resources, NWT
Rapporteur:	Mel Crystal Indian Negotiator, Ontario Ministry of Natural Resources
Facilitator:	Bob Andrews Director, Alberta Fish and Wildlife Division
Members:	Rhéal Bélisle François Bregha Graham Child Barry Hughson Jim Inder Rhoda Innuksuk

Instead of trying to priorize the various demands for wildlife, this workshop group identified a number of different approaches that could be successfully used to accommodate the various demands for wildlife in Canada. Two principal approaches were identified:

- identification by governments of wildlife-use priorities to be implemented by an explicit regulatory scheme; and
- allocation of wildlife quotas to user groups and subsequent development by user groups of specific quota priorities.

At present, economic factors are of minor importance in priorizing wildlife uses. As a result, wildlife is generally undervalued in Canada. If user groups were allocated wildlife quotas and allowed to make their own decisions as to quota use, economic factors would likely play a more important role in determining quota use. Presumably, user groups would order their priorities to the best economic advantage.

As an example, northern communities are currently allocated a polar bear quota. The community subsequently decides how the quota will be used (e.g., community hunting, non-resident hunting, barter) and proportional use of the quota. This kind of scheme would be particularly appropriate in the North (i.e., Northwest and Yukon territories), where there would likely be more agreement among members of a user group as to quota priorities. It may, however, be more difficult for southern user groups to achieve consensus on quota uses or priorities, because user-group interests are more diverse in the South. Government may, therefore, have to play a greater role in helping to establish user priorities in the South. User priorities in the North were identified as cultural, spiritual, traditional, and, most importantly, nutritional. The workshop group concluded that whatever system is adopted to determine wildlife-use priorities, native needs should receive a high priority.

The group went on to identify the tendency of wildlife managers to assume a possessive attitude towards management of wildlife in their respective jurisdictions. If wildlife is to be effectively managed, resource users need to be involved in the decision-making processes that determine wildlife-use priorities. Notwithstanding the need for public consultation in establishing wildlife-use priorities, minority-use priorities will need to be protected by government.

Joint government/user wildlife-management boards were recommended as a way of incorporating user groups' concerns in management decisions and of ensuring user accountability. The group recommended that competing or conflicting interests were best addressed on a case-by-case basis. The effects of outstanding native claims on wildlife-management decisions were also considered. The group concluded that native land claims needed to be resolved in order to allow for better management and priority-setting.

Workshop report (4)

WORKSHOP 3--MANAGING CANADIAN ENDANGERED WILDLIFE

Chairperson: Gordon Kerr
Regional Director, Western and Northern Region
Canadian Wildlife Service

Rapporteur: David Pike
Director, Newfoundland Wildlife Division

Facilitator: Art Martell
Regional Director, Pacific and Yukon Region
Canadian Wildlife Service

Members: Bob Campbell
Chuck Dauphiné
Arthur Frayling
Geoff Holroyd
Kevin McCormick

This workshop group began with the observation that Canadian wildlife continues to be threatened because there is no single mechanism to effectively address the problem and no mechanism for co-ordinated action. The legislative tools to address the problem are also incomplete.

The group identified three categories that need to be addressed if threats to wildlife are to be minimized in Canada: status, recovery, and prevention. For each category, needs and actions were identified. Actions were further categorized as to whether they were existing, incomplete, or absent. Results of the group's assessment are shown in Table 1.

Existing legislation

The existing legislation and its effectiveness were reviewed, including how information about existing legislation is conveyed to the public. The legislation discussed is reviewed briefly below:

(1) The Committee on the Status of Endangered Wildlife in Canada (COSEWIC) addresses species and sub-species populations; however, the treatment is incomplete because super species and their behaviours are not addressed. Also, COSEWIC is not legislated in all jurisdictions. Information about COSEWIC is available in status reports.

(2) The Recovery of Nationally Endangered Wildlife (RENEW) program addresses terrestrial vertebrates only; fish and other animal groups, as well as plants, are not addressed. The program is project-specific only, as are Wildlife Habitat Canada, World Wildlife Fund, and provincial recovery programs. Despite requests from the public, there has been no policy

Table 1. Actions required to minimize threats to wildlife in Canada.

Category	Needs	Action
Status	Development of categories and guidelines to determine species and sub-species populations, "super species," and behaviours	Determination of status; this currently exists
	Ecosystem approach	Determination of status is required; this is currently absent
	Commitment/co-ordination	An appropriate administrative structure is needed; this is currently incomplete
Recovery	Commitment to action and co-ordination of action	Recovery plans are needed; these are currently incomplete
	Policy	A uniform policy is necessary; this is currently absent
	Ecosystem approach	A co-ordinated, land-based strategy is required; this is currently absent
Prevention	At the national, provincial, territorial, and regional levels, development of conservation strategies	Implementation is needed through co-ordinated actions of responsible agencies; this is currently absent

developed on priorities for managing endangered species. There are, however, individual policies relating to such things as genetic purity and reintroduction of rare species.

(3) Parks, refuges, and ecological areas provide land areas for plant and animal species that would otherwise be endangered. These land areas, however, are often small and provide (at best) only islands of habitat.

(4) Other legislation includes the North American Waterfowl Management Plan (NAWMP), northern land-use planning, soil- and water-conservation programs, the national wildlife monitoring survey, and provincial integrated resource-management plans. Information on these programs is available in various government reports.

Recommendations

Out of the workshop discussion, the following recommendations were developed:

- develop a comprehensive Canadian endangered-species policy;
- encourage the development of legislation to conserve endangered species;
- broaden COSEWIC's mandate to include all species, populations, super species, and behaviours;
- create a committee to determine the status of ecosystems and habitats;
- create a committee to co-ordinate the conservation of ecosystems;
- implement RENEW;
- expand RENEW to include all species and populations; and
- implement provincial conservation strategies through integrated resource-management plans.

Workshop report (5)

WORKSHOP 4--ENVIRONMENTAL CONTAMINANTS

Chairperson: Michael Keating
Environment Reporter, Globe and Mail

Rapporteur: David Peakall
Chief, Toxicology Research Division
Canadian Wildlife Service

Facilitator: Merrill Prime
Director, Nova Scotia Wildlife Division

Members: Gilbert Clements
Sharon Dominik
David Olsen
Nestor Romaniuk

This workshop was asked to examine the problem of environmental contaminants. Four themes were discussed during the workshop, each of which is discussed below.

Theme 1: Sustainable development

The workshop group decided that the issue of environmental contaminants was best addressed by first examining the need for a broad approach to environmental problem-solving. It was concluded that a national approach to the problem of sustainable development is needed. Currently, there are conflicts at both the federal and provincial levels between those agencies responsible for development and those agencies responsible for sustaining natural resources. Mandate problems also exist between the different agencies responsible for environmental issues.

The group decided to recommend that the Federal-Provincial/Territorial Wildlife Conference ask the Council of Resource and Environment Ministers (CCREM) to request the First Ministers to create a national panel on sustainable development. Such a panel would have broad membership, including governments, academics, industry, non-governmental organizations (NGOs), native peoples, and labour. The panel would hold national debates on sustainable development, develop strategies for long-term utilization of Canadian resources, and advise and influence decision-makers and public opinion about the realities of meeting developmental needs, including industrial and agricultural needs, without causing irreversible damage to the environment.

To be effective, a national panel on sustainable development would have to have the prestige needed to influence government at the highest level. It would also need to operate over a long time period. It would require the leadership of a person or persons of impeccable credentials, a small, high-calibre, permanent secretariat, and the ability to call upon the best minds in the country.

Theme 2: Information transfer

There is a lack of adequate information exchange among agencies about contaminants and wildlife. Broadly, five organizational levels need to be considered: international, federal, provincial, local, and individual. It is important that information be exchanged over the entire range of these organizational levels and in both directions.

The group decided that the Federal-Provincial/Territorial Wildlife Conference should ask CCREM to create a national information system on contaminants affecting wildlife.

Needs will vary with the type of issue being addressed, but can be divided into two main categories:

(1) Broad-scale issues: Carbon dioxide and other greenhouse gases, ozone depletion, acid rain.

Needs: There is a real need for the exchange of information in order to inform wildlife managers, biologists, and naturalists of the type of effects to be expected and to facilitate the flow of information through the system. It will be virtually impossible to obtain data over a wide enough area and over a long enough time without "amateur" help. A specific example is the distribution of loons in relation to the acidification of lakes.

(2) More-specific issues: Pesticide usages and industrial chemicals.

Needs: There is a need for information exchange in both directions. At the national and international levels, there is a good deal of information available on pesticides and other toxic chemicals. There are, for example, sizeable international databases for the expert (e.g., the United Nations Environment Program (UNEP) Registry of Potential Toxic Substances, the Minimum Pre-market Data on the Organisation for Economic Co-operation and Development (OECD), and information collected under the 6th Amendment of the European Economic Community (EEC)). This information could be useful not only to the professional, but also to a wide audience.

Despite the formal registration process for pesticides, there is the potential for error. Many pesticides were initially registered when lower standards were in place. Re-examination of these pesticides is slow and difficult. Assessment of industrial chemicals is carried out both federally and internationally, but the database is often poor. The proactive approach is undoubtedly the correct one, but, given the present state of knowledge, a safety net is needed.

The group concluded that a grass-roots network of naturalists, informed public, etc., is needed to alert officials of untoward events (e.g., mortality of wildlife, changes in occurrence and abundance of animals) in order that effective preventive action can be taken. In the reverse direction, there is a need for federal and provincial officials to inform wildlife managers, biologists, and naturalists of potential problems, information on areas of concern, and type of effects to be expected.

Theme 3: Education

Despite the progress of increasing public awareness about environmental issues, there is a real need to improve public knowledge about broad ecological issues so that informed decisions can be made.

The group decided that the Federal-Provincial/Territorial Wildlife Conference should ask CCREM to encourage and assist in the development and improvement of curricula for environmental education across Canada. This could include involving the Councils of Ministers of Education and/or dealing directly with provincial education departments.

Theme 4: Public information

There is a need for better public information about contaminants and environmental issues.

The wildlife community, including government and NGOs, should work to educate the news media at all levels, from editors-in-chief to reporters, about environmental issues and to develop long-term contacts with the news media on a continuing basis, not just in times of crisis.

Workshop report (6)

WORKSHOP 5--NATIONAL AND INTERNATIONAL CO-OPERATIVE AGREEMENTS

Chairperson:	Tony Keith Director, Wildlife Toxicology and Surveys Branch Canadian Wildlife Service
Rapporteur:	Hugh Monaghan Director, Yukon Territory Fish and Wildlife Branch
Facilitator:	Louis Lemieux President, Canadian Wildlife Federation
Members:	Jack Berryman Ken Brynaert Doug Hagan Merv Markell R. Douglas Sirrs

This workshop reviewed the national and international co-operative agreements to which Canada is currently committed. The following agreements were covered:

- North American Waterfowl Management Plan (NAWMP)
- Migratory Bird Convention and protocol
- Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES)
- The Ramsar Convention on Wetlands of International Importance
- International Polar Bear Agreement
- Proposed International Porcupine Caribou Agreement

General conclusions were drawn about the effectiveness of each agreement and the implications for wildlife management in Canada.

NAWMP

The principal benefit of NAWMP is the development of a continental strategy for waterfowl management in North America. The plan includes the identification of priorities and target objectives for specifically identified problems. The plan is considered second only in importance to the Migratory Bird Convention treaty of 1916.

In order for the benefits of the plan to be realized, sufficient funding must be secured to implement the operational phases of the plan. Funding is currently being secured. Development of the plan is a particularly positive example of how an interjurisdictional agreement can be drafted to allow for co-ordinated management of a major species concern. The plan has been structured so that a flexible approach is possible. This represents an improvement over previous treaties, which were more legislative in nature and as a result more rigid. The more flexible and dynamic approach of NAWMP allows for the incorporation of new information as it becomes available and for responding to conditions as they change.

Migratory Bird Convention and protocol

The Migratory Bird Convention treaty, signed in 1916, was designed to protect migratory birds. As a conservation tool, it has been effective over the past 70 years. The treaty is not, however, without problems.

Successful negotiation of a protocol is needed to amend the allocative inequity. The protocol should be accompanied by a statement of intent regarding implementation. As a general consideration, the group concluded that national and international agreements need to be sufficiently flexible that they are responsive to changing conditions, in turn enabling appropriate management responses.

CITES

The original intent of CITES was to control international trade in endangered species. Several difficulties have arisen with the implementation of the establishing convention. Unfortunately, the net result has not been substantial conservation benefits for North American species. There is, however, considerable cost associated with administration of CITES as it applies to existing wildlife-management programs. In North America, the difficulties associated with the convention have led to suspicion of other conservation agreements. Despite the obvious difficulties, there has been some benefit in the conservation of endangered species outside North America. It is important that the present difficulties associated with administration of this convention are resolved, otherwise a number of countries will likely withdraw.

Ramsar

Although this convention, which promotes the conservation of wetlands, is not legally binding, it has had a considerable effect on global wetland conservation. Often its effect has been complementary to that of other conservation policies. The convention has been particularly beneficial in those countries that do not have other specific policies for identifying and protecting wetlands. Because the convention is global in its focus, it is particularly useful for addressing widespread change in the global wetland base.

International Polar Bear Agreement

This has been a particularly effective convention in encouraging the circumpolar conservation of polar bear by the five nations involved. The polar bear conservation programs that have been developed by the nations involved reflect an attempt at co-ordinated research programs and the involvement of "user" representatives. The involvement of the latter has allowed for effective implementation of each nation's program.

The enactment of the US Marine Mammals Protection Act, however, has negated polar bear management programs in Alaska. Current polar bear management programs are in conflict with this act. The act also prohibits the importation of polar bear hides, legally taken in Canada, into the United States. As a result of the Marine Mammals Protection Act, the United States is now faced with the dilemma of this legislation negating the effect of the International Polar Bear Agreement.

Proposed International Porcupine Caribou Agreement

This agreement is intended to facilitate co-ordinated conservation of the Porcupine caribou herd and its habitat. The agreement would provide for the formation of an international board to implement the agreement and to allow for user participation on the board. The agreement requires that the parties involved inform one another of any intended changes in user allocations and that recommendations developed by the board be given serious consideration by the respective governments involved. The group concluded that the agreement, as proposed, should be signed expeditiously in order to facilitate management of the herd.

Workshop report (7)

WORKSHOP 6--PIECING TOGETHER THE ECONOMIC PICTURE

Chairperson:	Nellie Cournoyea Member of the Legislative Assembly Government of the Northwest Territories
Rapporteur:	George Finney Regional Director, Atlantic Region Canadian Wildlife Service
Facilitator:	Don Simkin Director, Ontario Wildlife Branch
Members:	Tony Clarke Blair Dawson Felix Emanuel Del Haylock Juliette Krause Ron Lancour Ian Marshall Sadie Whitbread

This workshop group reviewed a number of issues pertinent to developing a set of general conclusions and recommendations about the economic value of wildlife. Both game ranching and hunting/trapping were reviewed.

Game ranching

In Ontario, only game ranching of non-native species is allowed, although some elk and fallow deer are raised. The game-ranching policy in Manitoba is similar. Concerns about game ranching centre on the removal of native species from the wild, fear of disease, genetic mixing of domestic and wild stock, and the development of a black market for the sale of illegal meat. Game ranching is attractive, however, because of the potential for producing substantial amounts of animal protein on marginally productive farmland. Many Indian bands in Canada want to game ranch because of economic opportunities. The group concluded that game-ranching opportunities should be pursued on a case-by-case basis, with consideration of the economic viability of each operation.

Hunting and trapping

The group identified a need for better education of southern residents as to the nature of hunting and trapping in the North, in order to effect better management of northern species. Most southerners, for example, believe that the muskox is near extinction. There are, however, 20 000 muskoxen on Banks Island, such that overpopulation is a serious problem.

The group concluded that there is a need for marketing studies in the North to identify markets for wildlife and to help diversify the economy. Serious concern was expressed by Nellie Cournoyea about establishing a dollar value for wildlife, because valuation of the resource could potentially lead to misuse: i.e., industry could trade the cash value of an animal population, such as beluga whales, for the opportunity to develop the oil industry in the North. Any economic-valuation model must include more than the dollar value of wildlife. It may also be necessary to have different economic-valuation systems in the North and South, to accommodate the different values placed on wildlife.

If trappers are to realize more for their furs, training is essential on how best to handle furs to ensure a high quality. Timing of sale is also important. For example, if muskrats were harvested by the people of Old Crow at different times of the year, a 40% increase could be realized per pelt. In Ontario, where hunter education has been intensive, trappers have realized a 50% greater return on pelts, in contrast to areas where education has not been available.

Economic benefits also need to be provided to the private landowner through access fees; otherwise, there is minimal incentive to maintain habitat. It is also important to try to avoid conflicts between different kinds of users, i.e., consumptive versus non-consumptive.

Conclusions and recommendations

(1) Sound economic data are needed for all wildlife-related activities to facilitate program planning and budgeting. These data, once prepared, have many other uses. Data are needed at various levels of aggregation; e.g., good national data on the value of wetlands are needed as overview information, whereas site-specific data are needed for municipalities considering drainage.

(2) There is an increasing need for sound biological data to support management actions. Wildlife-management decisions will be subject to greater scrutiny, especially as they relate to consumptive use. Wildlife managers in the future will have to provide hard data on the economic and social benefits associated with hunting and trapping, if these activities are to continue.

(3) Substantially more effort needs to be devoted to evaluating and informing the public about the social and economic benefits of hunting and trapping. Without public support, the associated economic benefits cannot be maintained.

In conclusion, Canadians need a better appreciation of wildlife as a valuable resource. The value of wildlife needs to be converted into whatever language decision-makers understand, e.g., dollars, jobs, social benefits. In this respect, southern Canadians lag behind their northern counterparts, who have a well-developed understanding of the value of wildlife.

Workshop report (8)

WORKSHOP 7--NEW APPROACHES AND INITIATIVES FOR WILDLIFE SUPPORT

Chairperson: Barry Turner
Member for Ottawa/Carleton, Government of Canada

Rapporteur: Dave Phillips
Saskatchewan Wildlife Branch

Facilitator: Colleen Hyslop
Canadian Wildlife Service

Members: Gilles Barras
Joe Bryant
Steve Curtis
Cathy Jewison

This workshop group discussed ways in which money could be raised to better support wildlife research and management in Canada. As a starting point to the discussion, traditional approaches were reviewed, including the following:

- user fees
- excise taxes
- income-tax checkoffs
- lotteries
- conservation bonds

Many of these approaches were reviewed at last year's Wildlife Colloquium.

User fees have, in many instances, been successful; however, heavy user fees can often be a deterrent to consumptive use. Frequently, non-consumptive users benefit, but do not contribute to wildlife-management costs. Non-consumptive users could be taxed through the application of excise taxes. Unfortunately, this does not equalize the costs among consumptive and non-consumptive users, because the former are already more heavily taxed. Lotteries specifically devoted to raising money for wildlife could generate substantial funds.

Other mechanisms examined by the group included local and corporate sponsorship of projects and fiscal and tax incentives. Large corporations have often sponsored wildlife studies of substantial profile. Local sponsorship could potentially be as effective. A special effort would need to be made for funds raised locally to demonstrate the benefits both to the local community and to wildlife.

Fiscal and tax incentives might include the following:

- voluntary contributions
- tax rebates
- tax credits
- development fees

A system of tax rebating, as employed in various US states, could potentially be very effective. The converse, of not providing grants or subsidies to landowners that drain or farm marginal land, could also be effective (e.g., the "sodbuster" and "swampbuster" provisions in the United States).

Special development fees could be applied. For example, a special fee could be applied to the cost of a house or industrial lot. Homeowners and small businesses would need to know that the fee was applied because wildlife was displaced by their landsites. The money generated could subsequently be used for wildlife-related projects.

Marketing of Canadian wildlife might also be an effective way of raising money. Small wildlife interest groups could potentially generate substantial monies. Wildlife items, such as clothing and equipment, could be marketed, with the profit used for wildlife-related projects.

Most Canadians agree that there is a need to better distribute the costs of wildlife management. Conflicting government policies, however, will have to be resolved. Greater policy integration is needed to resolve intragovernmental conflicts.

Money raised through new funding initiatives could be managed and distributed through co-operative wildlife-research units. Research boards could be established, based on regional co-operative wildlife-management units. Members of the boards should include representatives from government, industry, and academic institutions. The boards would have two roles: direction of academic research, and initiation of applied projects. General guidelines for the operation of all regional boards would need to be established. Representatives from each board (five boards are envisaged) would meet with the federal government annually to decide funding allocations.

Conclusions

In summary, the group concluded the following:

- non-consumptive users need to be the target of specific initiatives if funds are to be successfully raised through this group;
- marketing research is needed to identify potential supporters;

- reconciliation of conflicting government programs is needed to better facilitate wildlife management and to reduce the costs associated with program duplication;
- money raised through new fund-raising initiatives is best spent on local projects to help change community attitudes; and
- better use of the media is needed to convince the public of wildlife values.

Workshop report (9)

WORKSHOP 8--ECOLOGICAL RESERVES OR THE REFUGE APPROACH

Chairperson: Larry Jahn
President, Wildlife Management Institute

Rapporteur: Jim Walker
Director, British Columbia Wildlife Branch

Facilitator: Jim Stoner
I/Director, Migratory Birds and Wildlife Conservation Branch
Canadian Wildlife Service

Members: Bernie Forbes
Elmer Kure
Dave Neave
Doug Pollock

Ecological reserves were defined by this group as areas that are visible examples of natural or modified ecosystems, protected by law or by dedicated ownership because of their heritage values and their suitability for research, monitoring, and environmental education. A comprehensive system of ecological reserves should include reserves that represent the diversity of terrestrial, freshwater, and marine ecosystems in Canada. Man-modified ecosystems that are or can be potentially managed to ensure sustainable productivity also warrant attention.

The refuge system in the United States, which is similar to Canada's system of ecological reserves, was implemented in the 1960s. Since then, it has been modified to permit activities in refuges that are compatible with the purpose of the refuge. This is similar to the management of National Wildlife Areas in Canada. Rather than using the term "refuge," which has a negative connotation for areas with special status, refuges could be more appropriately called "Management Area Systems."

Reserve-area uses

The workshop group concluded that setting aside large tracts of land for single-purpose use was not appealing to politicians and could not be used to meet all of Canada's wildlife objectives. Reserve areas serve the following purposes:

- protection of endangered species or unique features

- scientific benchmarks of unaltered ecosystems

- education

- maintenance of critical habitat

Although not all species can be managed through the establishment of ecological reserves, large areas need to be designated for those species with large home-range requirements (e.g., grizzly bear and moose).

Problems encountered

Some of the problems that wildlife-management agencies have encountered as a result of establishing large reserve areas include the following:

- retention of land with low wildlife value;
- refusal to consider other uses;
- inability to do the required follow-up monitoring or to allocate research dollars;
- lack of a demonstrated capability to manage natural resources; and
- failure to adequately communicate the need for and purposes of ecological reserves.

The workshop group concluded that future wildlife management is best achieved through integrating wildlife-management needs with other resource users on both private and public lands.

Recommendations and conclusions

The following recommendations were developed.

(1) Where it does not exist, each province or territory should establish a committee composed of agencies/organizations to acquire land through the development of a strategic plan for land acquisition and designation.

(2) Each committee should develop a management plan for each wildlife-management area.

(3) A review of all acquired management areas is recommended every 5-10 years to reconfirm the value of acquired areas and to develop a strategy for use. If an area is no longer best managed as a wildlife-management area, it should be transferred to another system or otherwise disposed of.

(4) More consideration should be given in the future to acquiring sufficiently large areas of land for species with large home-range requirements or species that are particularly susceptible to disturbance.

(5) More effort is needed to inform the public about the importance of and management objectives for wildlife-management areas. More effort is needed to publicize acquisition of wildlife-management areas.

In conclusion, the workshop group reiterated that although the designation and acquisition of special management areas are valuable, more effort should be directed to managing wildlife on an integrated basis on private and public lands. New approaches, including innovative incentives for private landowners, need to be developed to achieve integrated use. The workshop group also observed that a major impediment to wildlife management in southern Canada is the difficulty of convincing urban populations of the value of wildlife. Because of the high percentage of native people in the North, the majority of northerners value wildlife highly. This may help to ensure better resource management in the future.

Workshop report (10)

WORKSHOP 9--PARTICIPATION IN RESOLVING ISSUES

Chairperson:	Peter Pearse Professor of Forestry and Economics University of British Columbia
Rapporteur:	Arthur Hoole Director, Manitoba Wildlife Branch
Facilitator:	Stewart Morrison Executive Vice-President, Ducks Unlimited (Canada)
Members:	Dave Ealey Bill Hall George Scotter Art Smith

This workshop group began by examining the wildlife-management principles that have been employed in North America up to the present, in order to better determine future requirements for wildlife management. Four principles were identified as having influenced wildlife management in Canada:

- public ownership

- concept of common property

- prohibition on marketing wildlife products

- restriction of private management

Currently, wildlife populations in Canada are managed by public agencies for individual use. The group examined the suitability of this practice, in view of the highly technical and industrialized society we have become. Consensus was reached that changes in traditional wildlife-management practices are needed. In many instances, economic factors have contributed to loss of wildlife habitat and wildlife species. Economic valuation of wildlife is particularly needed, as are economic incentives to protect wildlife. Furthermore, there is a need to determine the benefits to the public from wildlife and the public's willingness to pay for those benefits. It was agreed that new wildlife-management practices were possible without abandoning established principles and opportunities.

Future wildlife-management requirements were identified, as well as present and preferred trends:

Requirements	Trend	Preference
Non-consumptive uses (including non-game)	Growth	Growth
Native use	Stable	Growth
Traditional sport hunting	Less	Growth
Specialized hunting	Growth	Growth
Commercial wildlife products	Growth	Growth

In order to achieve the above, future wildlife needs should include the following:

- protection and enhancement of habitat

- a constituency of public support

- a variety of management systems

- recognition of the economic values of wildlife

A range of public participation possibilities was identified, including the following:

- public information

- co-management

- delegation of management authority

- consultation

- privatization

For each of the participation possibilities identified, the associated priorities and needs of the next two decades were identified.

Public information

Target audience	Needs
Schoolchildren/teachers	Appreciation of wildlife and environmental values Management needs
Wildlife users	Understanding of access rights Appreciation of values of others Management needs
Conflicting habitat users	Understanding needs of wildlife and benefits realized from wildlife

There is an overall need to take advantage of the many ways of communicating information, e.g., radio, television, commuter networks, and modum links.

Co-management

Forms	Needs
Informal	Information and understanding Incentives Administration support and response
Formal	Legal provisions Commitment and political will Financial incentives

There is an overall need for inter- and intragovernmental co-ordination and co-operation with non-governmental organizations.

Delegation of management authority

Forms	Needs
Informal (i.e., private participation in management allocations)	Clear definition of management problems Focused interest
Formal (i.e., licensing private/commercial users, game farming, community responsibilities)	Political will and confidence Experimentation with new licensing forms Financial incentives Public support

Consultation

Forms	Needs
Informal (i.e., public meetings, workshops)	Clear need and interest Good data Tolerance Meaningful feedback
Formal	
Formal policy advisory boards	Independence Clear terms of reference Accountability
Special-resource consultative bodies	High priority Representation by well-defined constituencies Confidence

There is a need for information exchange between all parties.

Privatization

Privatization of wildlife was not considered as necessary or politically supportable. A cautious approach was suggested.

Recommendations

The following recommendations were developed:

- an essential component of future wildlife management should be public involvement;
- experimentation with co-management programs and delegation of management authority should be undertaken;
- full advantage should be taken of available media forms to improve public awareness and understanding and to promote public involvement in management; and
- priority should be given to using sophisticated environmental assessment systems, particularly in the North on large-scale development projects, and to integrating resource demands.

Trapping standards and regulations across Canada (1)

OPENING REMARKS

Joe Bryant
Brystra Consultants

The conference organizers have asked some representatives of trapping organizations to say a few words to us this morning. Del Haylock, who will be speaking to us first, is Executive Director of the Fur Council of Canada and is involved in reorganizing and directing the fur trade's promotion and marketing ventures on both national and international levels. He is also a Director of the Fur Trade Association of Quebec and the Fur Trade Association of Ontario. He will be followed by Ron Lancour, who is Executive Director of Trappers International Marketing Service and also speaks as a very experienced trapper, a member of the Board of Directors for the Fur Institute of Canada, a former President of the BC Trappers Association, a former trapper-education specialist, and a man who has been involved in the trapping industry all his life. Finally, Bob Gardiner, who is the Executive Vice-President of the Canadian Association for Humane Trapping, a Director of the Fur Institute of Canada, a Director of the Canadian Federation of Humane Societies, and Chairman of its Humane Trap Development Committee, will speak to us on the humane-trapping issue--a major issue in this country and in the fur industry in general.

Trapping standards and regulations across Canada (2)

A USER-GROUP PERSPECTIVE

Del Haylock
Executive Director
Fur Council of Canada

Because I represent various segments of the fur trade primarily outside of the trapping community, I thought it would be appropriate to give you a view of the fur trade from the downstream or the secondary industry, i.e., the user groups.

User groups

The groups that use trapped furs include dressers, dyers, and the fur-skin merchants, manufacturers, and retailers. Without the user groups there would be no rationale for trapping because without the users there would not be the takers.

User groups, a secondary trade in Canada, are a relatively recent phenomenon. It dates ostensibly from the Second World War when, as a product of immigrant ingenuity, talent, and expertise, the new immigrants to this country built up a manufacturing industry.

Downstream fur trade

The fur trade is really an artisanal trade--a trade that is composed of handicraftsmen, people who apply their talents learned from many years of experience and training.

Today the downstream fur trade is a highly skilled and successful entrepreneurial industry. Canada has about 370 firms and approximately 6000 skilled artisans that produce some $450 million in finished product at the wholesale level. We export about half of that product to some 80 countries around the world. This has come about through an organized and highly sophisticated marketing program, in which we in the Fur Council of Canada and our sub-organizations are infinitely involved. For example, the Canadian International Fur Fair in Montreal has about 125 Canadian exhibitors and $150 million in orders booked for those firms that are in the fur-coat business. So the Fur Council of Canada plays a very active role in promoting the use of this type of product in Canada and abroad. It also puts out various catalogues and information to encourage that activity abroad, through store promotions in the United States and increasingly more so in Europe.

Fur week

Each year the Fur Council of Canada works very actively with the Retail Fur Council on a fur week, to promote the consumption of the product in Canada. This year, we are committed to building on this base, and we are looking to various wildlife services and Project Wild co-ordinators across the country. We have had discussions with the Fur Institute of Canada to broaden that promotional base and to attempt to take a message into the schools, through the educators, to encourage people to understand what the fur trade is about, its record on humane trapping, and what it is doing to improve its activities in that area. I would like to encourage any wildlife people here and Project Wild people to get involved with the Fur Institute of Canada and the fur-week activities, so that we can make this a successful endeavour. The Fur Council of Canada is interested in financially supporting those types of activities because it is important that young people understand the fur trade.

The theme for fur week this year will be "Getting to Know the Fur Trade Better." We think that through activities in some 10 regional centres, emphasizing fashion, conservation, and training of our furriers, we can bring about a greater degree of harmony and continuity.

Fur fashions

We think that fashion is very important in terms of selling and marketing our product. We have been active in the last 2 years in encouraging students from fashion colleges to design and style furs. It has been very successful--we had over 800 students enter designs into our competition this year. Of these entries, 113 were successfully judged, and 12 coats are now being promoted and marketed across the country.

Trapping standards and regulations across Canada (3)

A TRAPPER'S PERSPECTIVE

Ron Lancour
Executive Director
Trappers International Marketing Service

It is an honour for me to be able to address this conference, as a trapper. We are currently having a lot of problems, as primary producers or trappers, with the anti-groups. The anti-groups are starting to attack not only users of wildlife, but users of any type of animals. We have participated in many press conferences, television debates, and panel discussions. When the anti-groups present us with traps with teeth and show animals with broken legs, we tell them that this sort of thing is not practised in Canada. We are immediately asked, is it allowed or is it not? We cannot at this time say that many of these practices are not allowed, because we do not have regulations in place that reflect the state of the art of trapping as it is practised in Canada today.

I have already had a chance to talk to many of the provincial representatives and delegates about our proposed trapping regulations to standardize regulations across Canada. Most of them seem very receptive.

Proposed regulations

In the workshops I heard a lot about international and provincial co-operation. Right now, co-operation on trapping regulations to help us in our job at the Fur Institute of Canada is very important. We must get some standardization in our regulations so that we can use these regulations in defence of our industry. We think it is important that we have donated a man-year at the Fur Institute of Canada to deal with this sort of thing. This person, in consultation with myself and the committee that I represent, will be visiting each of the provinces for discussions.

The types of things we are proposing include the following:

- prohibit the use of hooks and sharp devices for the purpose of harvesting furbearers;

- use locking devices on snares;

- use submersion sets properly for aquatic species;

- prohibit the use of poison for the harvesting of furbearers;

- require all first-time trappers to take education courses: just about every province has in place strict requirements that first-time hunters must take hunting and conservation courses--why should it be any different with trapping?;

- prohibit the use of spring pulls; and

- prohibit the use of traps with metal teeth.

All of these are cosmetic-type regulations that reflect the state of the art of trapping as it is practised today and what we are teaching in our trapper-education courses. Most of the regulations that we are proposing are based on those that are in place in Ontario and in British Columbia.

Trapping standards and regulations across Canada (4)

A HUMANE-TRAPPING PERSPECTIVE

Bob Gardiner
Executive Vice-President
Canadian Association for Humane Trapping

I am going to speak from the point of view of the Canadian Federation of Humane Societies and the Canadian Association for Humane Trapping (CAHT).

I think many of you know about CAHT. We did the first trap research. We did the first trap-exchange program, where we exchanged Conibear traps for leg-hold traps. We have been extensively involved in trapper education. We have shown trappers how to trap in more humane ways. We have shown trappers how to improve their existing traps to make them more effective. We have had various conferences and a number of programs over the years. Our position at CAHT is that we are not opposed to trapping, but we want to work with trappers and governments to make trapping more humane.

The Canadian Federation of Humane Societies has 40 animal-welfare groups as members, including all the provincial Societies for the Prevention of Cruelty to Animals (SPCAs) that are legislated for the purpose of preventing cruelty to animals.

The federation has worked with CAHT on a number of the programs that I have mentioned. These two associations are probably the only animal-welfare groups left in the world that have a humane-trapping point of view as opposed to an anti-trapping point of view, an animal-rights point of view, or an anti-fur point of view. I think it is very significant that you realize that the middle-of-the-road, mainstream animal-welfare groups in Canada have a humane-trapping point of view. They have not been trying to stop trapping. That is a unique situation, as far as we are aware.

Need for humane-trapping regulations

I want to talk about the need for humane-trapping regulations. I want to put forward the benefits and show the reasons why humane trapping would work well for the trappers, for the ministries, and for the animals. The basis for the need for humane-trapping regulations--the reason the public is concerned and the reason the animal-welfare groups are concerned--is our concern about the pain that the animals suffer in traps. We know that trapping can be done very humanely so that either animals are killed instantly or their pain is minimized. However, there are a number of circumstances in which animals suffer intense pain; in some cases, it is quite prolonged. There are about 3 million animals trapped in Canada each year. Luckily, a number of those can be trapped in ways that avoid the painful situation. We are trying to address the situations in which the animals suffer pain that can be eliminated.

CAHT has done an extensive study on pain. A brochure on it, called "Why Humane Trapping," is available to anybody who wants it. There are several pain experts across the world who have confirmed that animals feel pain in traps. We say that trappers and governments have the responsibility to do everything that can be done to make trapping more humane.

The Fur Institute of Canada passed a resolution this spring that states that there should be humane-trapping regulations across Canada. As well, the Fur Institute of Canada stated that there should be mandatory trapper education for first-time trappers and minimum standards for trapper-education courses. We in the humane-trapping movement were very impressed by seeing the leadership of trappers, the fur industry, and government groups come forward with that kind of recommendation. That is one of the best assurances that we have had that things can be done in the way that the public is seeking.

We know that over 90% of animals trapped can be killed quickly using quick-killing traps or methods. That is not being done, but it can be done--that came out of the Federal-Provincial Committee for Humane Trapping's recommendation reports. We feel that if we do exercise the proper stewardship to take care of the animals that we trap, then we will manage the natural resource in a responsible way and need not be defensive as trappers.

Standing Committee on Aboriginal Affairs and Northern Development

Another important thing that has happened this year is that the Standing Committee on Aboriginal Affairs and Northern Development made its recommendations this spring. Recommendation No. 10 (in their report) calls for a federal-provincial/territorial committee to be established to work in consultation with the Fur Institute of Canada to develop and implement legislation that is consistent across the country, relating to standardization of trapping methods, standardized trapper education, and mandatory trap checks. For the first time, the Government of Canada stated its support of aboriginal and trapping rights and trapping, and said that there needs to be legislation, mandatory trap checks, and trapper education. The Government of Canada also said that this particular conference was the appropriate place to address these issues. It recommended that the provincial and territorial ministers meet to review this with the Fur Institute of Canada; this is one of the reasons why this is the right forum for these topics to be brought up today.

International opinion

There are more than 60 countries that have either regulated trapping with leg-hold traps or banned it entirely in their countries--many of the European countries and many of the Third World countries. It behooves us to improve our image in Canada so that we have a set of regulations that look good internationally and help our reputation. A lot of different countries have animal-welfare issues that have given them a bad reputation. Canada suffered after the seal hunt. In Spain, the bull-fighting issue gave them a bad reputation. In the Philippines, there is the dog-eating situation. The World Society for the Protection of Animals (WSPA), the umbrella organization for the animal-welfare groups of the world, has gone on an international anti-fur campaign--it represents over 450 groups in the world and is going to be focusing on Canada.

Public-opinion polls

Public-opinion polls tell you general messages. Here are some examples.

Canadian Wildlife Service's 1981 National Survey

The Canadian Wildlife Service's 1981 National Survey showed that about $4.2 billion were spent in that year on non-consumptive wildlife uses. About 15.5 million Canadians were involved in using wildlife on a non-consumptive basis--that accounted for about 83% of the population. Hunters made up about 10% of the population; they garnered another $1.2 billion. About 83% of the people who responded to the survey expressed a real interest in the use of wildlife: 73% were not interested in consumptive uses; 10% were particularly concerned about and wanted to have consumptive uses of wildlife; another 16% were somewhat interested. There are 100 000 trappers in Canada; about 50 000 of them are said to be native trappers. There is a total income of about $600 million a year to Canada's Gross National Product; about $41 million is all that goes to the trappers. To me it is a sad thing that the trappers do not make more money out of their industry.

Canadian Gallup Poll

The Canadian Gallup Poll that was presented to the Malouf Commission had a statement saying that there are different attitudes towards the relationship between man and animals. The user statement said that man has the right to use animals in any way he wishes--4% agreed with that statement. The use or killing of animals should be properly controlled to minimize suffering and prevent extinction--48% agreed. Man should kill animals only when needed for important non-trivial uses and then only if there is little or no suffering--40% agreed. All uses of animals by man even for food or vital medical research are wrong and should be stopped--only 5% agreed. So only 5% fall within the broad general animal-rights range, if you want to use that general extrapolation, and only 4% fall within the outright user range. The rest, 88%, say there should be proper humane controls on animal use, and animals should not be used in such a way that makes them extinct.

Canadian sealers' poll

The Canadian sealers' poll points out several things. One statement said that it is acceptable to hunt and kill wild animals provided it is done humanely--76% agreed with that. Wild animals should not be used for luxury fur products--54% agreed. Whether or not the animal is an endangered species, it is wrong to kill wild animals for commercial purposes--

58% agreed. The killing of wild animals for sport is wrong--73% agreed. In other polls that were done on the seal hunt, the largest cause for public concern was the inhumaneness that they perceived--47-51% saw it in that light.

Abaccus and Angus Reed surveys

The Abaccus survey in the United Kingdom asked a number of fur-coat owners how they felt about it. Seventy percent of the fur-coat owners were opposed to the trapping of animals for their fur, and about half would support a campaign to stop people wearing furs. The Angus Reed survey in Toronto showed that the prevention of cruelty to animals scored 70%, whereas the animal-conservation or endangered-species point of view scored 68%, both high on the public agenda.

Environment Canada survey

Environment Canada had a final report on its qualitative investigation of the humane-trapping issue. It was probably an informal survey: many of the respondents were surprised that the leg-hold trap was still being used in Canada. There was a statement in the report that, while not necessarily perceived as a guilty party, the government has a responsibility for and is a main catalyst in implementing a more humane way of trapping. The report focused discussion on the reasons why many participants felt this. It revealed that governments or elected bodies have a responsibility for setting the rules. Participants were cautious to underline that this did not mean that trapping in Canada should become the domain of the government. Nevertheless, they felt that when people are faced with a potentially emotional and controversial issue, such as leg-hold trapping, they would most likely seek from the government some direction in terms of minimal controls. As one participant summarized it, the government is the state's moral mentor, telling us what to do in certain situations.

Regulations in Canada

Legislated opinion in Canada is another perspective. Each of the SPCAs has a duty. We have a legislated mandate to reduce suffering of animals and to work for animal welfare. There is a large number of acts that affect animals, including the Humane Slaughter Act, the regulations of the Committee on Seals and Sealing, and the Animals in Research Act. The Canadian Federation of Humane Societies deals with about 11 federal agencies on an ongoing basis, pursuant to different laws.

Criminal Code

In the strictest law of Canada, there is a moral code about animal suffering. Section 402 of the Criminal Code says it is an offence if a person wilfully causes unnecessary pain, suffering, or injury to an animal or a bird. There are other sections that say that a person has a duty to take care of an animal that is within its control and to prevent unnecessary suffering. At the federation, we have worked hard to make sure that the Criminal Code was not used against trapping. I have spoken in a Standing Committee of Parliament to urge that one of the initiatives to use the Criminal Code to go after trapping not be brought forward--that initiative was set aside in 1977. We have always said that the appropriate place to regulate this is in provincial legislation on trapping. But I bring it up to show that moral concern is a fundamental precept of Canadian society.

Provincial regulations

The Humane Trapping Regulations that came into effect in British Columbia are the sort of things that we are looking for now. Ontario's Humane Trapping Regulations are every bit as good as BC's--they both have done a good job in working with trappers to come forward with those kinds of regulations. In Ontario, the trappers worked hard to bring forward these Humane Trapping Regulations, and the Ontario Trappers Association deserves a lot of credit. We were able to give a progress award and $500 to the Ontario Trappers Association for its work in bringing forward the Humane Trapping Regulations there. When the Ministry discussed them with the trappers after they were brought into effect, there was not a single word of protest. The trappers in Ontario have been proud of the fact that they trap in a province in which trapping is done pursuant to humane regulations. In Ontario alone, between 700 000 and 3 million hours of animal suffering were reduced by following those regulations. I think hundreds of thousands of hours of suffering will be avoided in every province in which humane-trapping regulations are brought in.

The Alberta Trappers Association resolved at Edison, Alberta, in 1984 that its government should phase out the standard steel-jawed foot-hold trap for use as a restraining device on land; it asked for those regulations to be brought in by 1987. We made a presentation to the Minister in Alberta, and those regulations are before the Wildlife Advisory Council of Alberta; we are looking forward to seeing that moved forward.

In Nova Scotia, mandatory trapper education came into effect in August 1986, and the trapper-education manual came forward; that was done at the request of the trappers working with the government.

Trapper-education courses all across Canada are improving, and Alberta and BC are leading in this area. Quebec brought in humane-trapping regulations this year. It is unfortunate that the regulations do not require daily trap inspection, but many of the points that we are asking for were covered in the Quebec regulations.

CAHT's regional humane-trapping questionnaire found that six provinces still permit teeth on their traps and the use of hooks to trap furbearing animals. Eight provinces still allow animals to dangle alive in suspension sets. Only British Columbia and Ontario require daily trap inspection, and, together with Quebec, they restrict leg-hold traps on land and aquatic trapping. If the provinces bring in the humane-trapping regulations that we have proposed today (see Appendix), the Canadian Federation of Humane Societies and CAHT will endorse them as humane-trapping regulations and will do what we can from a positive point of view to publicize them.

Other contributions

The International Fur Trade Federation has donated $1.2 million to the Fur Institute's Humane Trap Research and Development Program over the next 3 years; it is a major contribution.

The Canadian Trappers Federation code of ethics was passed in 1978. It contains most of the major points we are asking for, things that we have been asking for for 50 years now.

The Fur Institute of Canada's Trapper Education Committee has done a number of things in terms of improving the Canadian Trappers Federation Manual; a lot of materials were brought forward.

Trappers' responsibilities

On the one hand we are really encouraged by the improvements, and on the other hand we are concerned that some trappers are not seeing that the best way to conserve their own way of life and trapping culture is to move forward now. The boards of directors of the trappers associations should now be pushing to get the humane-trapping regulations brought into place. Otherwise, the anti-groups are going to win those image wars. It does not take much: one picture on television showing an animal in a trap tells a big story. The thing to remember here is that conservation is not the issue, but a response to the issue. The issue is the suffering that animals go through, and that is what the public perceives. The way to address the issue is humane trapping; we must get these requirements under control.

The Canadian Federation of Humane Societies and CAHT are concerned about the ability of native trappers to put forward the very good image that they already have of being at one with nature, having a close relationship with animals, and caring about the animals that they deal with. I think that is a very important part of native culture to cherish and promote. To do that, I think they must show that they are keeping up with the humane education standards that the rest of the country is moving with.

Benefits of humane-trapping regulations

Humane-trapping regulations have a number of general benefits:

(1) They will reduce hundreds of thousands of hours of unnecessary suffering each year in each province.

(2) They will allow trappers to use a positive promotional tool to put forward their point of view, rather than putting forward defensive arguments: they can now say, "We are the guys who are regulating our own industry."

(3) The regulations will have a strong educational impact all by themselves, just by being in provincial brochures on trapping.

(4) There will be an entrenched code of ethics with the weight of authority of the law, and it will create an ethic in trappers of good trapping, becoming part of their skill and part of their pride--the trapper who does not trap humanely will be censured by his fellow trappers.

In the end, humane-trapping regulations will help to protect the trapper's way of life; once they are in effect, the vast majority of people will obey the law, and they will give the right tone to the trapping industry.

Past and future strategies

The Canadian Federation of Humane Societies has been trying for years to get humane-trapping regulations passed. Our strategy was to not publicize trapping issues in Canada for the last 15 years, but to let the trappers come forward with these issues. It did not work! In 1985, the federation called on the trappers and provincial governments to exercise responsible leadership to bring forward humane-trapping regulations. We gave them 2 years, until April 1987. By April, the Fur Institute of Canada had made positive moves, as had Quebec and Nova Scotia; we therefore convinced our members to extend another year to bring in and establish the regulations, with a further year to implement them. The federation is close to opposing trapping on moral and humane grounds. I hope that this strategy will stop that, and that the federation will stay as an animal-welfare humane-trapping group. We are all in this together. Each trapper is actually the animal-welfare person--the best thing that trappers can do for their image is to trap animals humanely, to go along with the opinion of the vast portion of the Canadian public.

I think fur managers and wildlife directors have a real opportunity to make a positive change to benefit the animals that are part of the mandate of natural-resources ministries. The federation and CAHT are asking for the wildlife managers in each province to bring forward the humane-trapping regulations and trapper education. We hope that you will make this a part of your strategy for the animals for the future.

Appendix

Canadian Federation of Humane Societies/Canadian Association for Humane Trapping

PROPOSED HUMANE-TRAPPING REGULATIONS

The following minimum humane-trapping regulations are proposed for each province:

(1) Each provincial government should now enact enabling legislation so that the Minister can promptly pass regulations designating approved humane devices and methods permitted to capture applicable species, once such systems have achieved humane standards. Other regulatory powers should be granted to the Minister pertaining to trapper-education programs, trap exchange, or trap-modification programs and other regulatory aspects of trapping.

(2) The standard steel-jawed leg-hold trap should be prohibited for use on land. In the case of wolf, fox, and coyote, only padded leg-hold or improved live-holding devices should be permitted until approved humane holding or killing devices are developed. As an interim measure, the standard one or one-and-a-half long-spring steel-jawed leg-hold trap may be set only as a killer trap for squirrel or weasel, respectively.

(3) Aquatic species should be trapped using quick-killing traps; as a secondary alternative, sets may be used whereby the animal submerges itself under water and is held by a slidelock device so that it may not regain the surface.

(4) All new trappers should be required to pass a test following a comprehensive mandatory trapper-education course emphasizing humane trapping techniques. Existing trappers should be required to attend in-depth humane-trapping education seminars periodically and should pass a challenge exam before 1 October 1990.

(5) All traps should be tended at least once each 24 h, preferably early in the morning. Box traps and other live-holding traps should be tended more frequently. Where justified as a result of intervening acts of God, tending of traps may be temporarily delayed.

(6) Teeth, serrations, hooks, or other projections should be prohibited on all traps.

(7) No live-holding device should be set in such a way that the animal will be suspended above the ground (e.g., prohibit spring poles, running poles, etc.).

(8) Only licensed trappers should be permitted to trap furbearing or nuisance animals.

(9) Humane devices should be mandatory for the capture of nuisance wildlife.

(10) Land-set killing snares should be prohibited (slide locks--interim basis).

(11) The 110 Conibear trap and the Northwood #100 trap should be modified to become two-springed traps.

(12) All traps should be maintained in mechanically fit condition.

(13) All trap chains on solidly secured live-holding traps used on land should be equipped with a shock-absorbing device, should be less than 12 in. long, and should be connected to a central pivot on the bottom of the trap in order to cushion the blow to the animal and reduce damage from lunging.

(14) No trap other than approved live-holding box-type traps should be used within 400 m of a residence. Such box traps should be tended at least once each 12 h and preferably more frequently.

(15) Each provincial government should establish quotas and seasons for the trapping and hunting of all fur-bearing and game species, including those not now regulated, having regard to the animals' best interests.

(16) Trap-exchange or trap-modification programs in conjunction with training programs should be established whereby trappers may trade standard steel-jawed leg-hold traps for approved quick-killing traps or humane holding devices.

(17) Only licensed trappers should be permitted to purchase traps.

Panel on "The emerging role of native organizations in wildlife management in Canada's North" (1)

OPENING REMARKS

Joe Bryant
Brystra Consultants

Looking back over some of the previous proceedings of this conference, I noticed that the last time the conference was held in the Northwest Territories (also the first time it was held in the Northwest Territories) was in 1970, at which time there was not even a native representative in attendance, let alone participating. In the last 5 years, native organizations, or at least people speaking on behalf of native peoples, have spoken at at least three of the five conferences. In 1982, in Whitehorse, Vic Mitander, of the Council of Yukon Indians, spoke very eloquently about the interests of native peoples in the subsistence use of wildlife. In 1983, in Edmonton, Peter Kelly (from Ontario) spoke on behalf of the Assembly of First Nations. In 1984, in Timmins, the Honourable Nellie Cournoyea spoke as Minister of Renewable Resources, rather than as a representative of native organizations, but she very ably carried the representation of native organizations at that conference. In 1985, in Halifax, the theme of the conference was "Communicating About Wildlife"; in retrospect, it is a little surprising that no native representative was registered. In 1986, in Ottawa, the Honourable Red Pedersen and the Honourable David Porter very ably represented native groups in the Northwest Territories and the Yukon Territory, respectively. Representatives of three provincial trappers organizations were also at that conference, but, as far as I can tell, no representative of any native organization was present, which surprised me, considering that the theme of the conference was "Canada's Role in World Wildlife Conservation" and the concern worldwide with the fur industry.

I hope that this panel on the emerging role of native organizations in wildlife management in Canada's North might encourage native peoples to believe that this conference does have significance for them. As this is the only national forum where government officials meet annually and in public with other national organizations concerned about the future of wildlife in Canada, native people may consider it worthwhile to attend and participate in order to ensure that their very special concerns about wildlife are better understood by those of us here and, through our good friends in the media, by Canadians in general and other peoples.

Our first speaker will be Rhoda Innuksuk, President of the Inuit Tapirisat of Canada. She was born in the eastern Arctic and has been actively involved in all phases of community life all her life. She has travelled widely in the North and in the South as a journalist and as a private citizen. She has worked for Inuit interests for many years as part of the Inuit Committee on National Issues and the Inuit Circumpolar Conference. She has a particular commitment to youth and to Inuit community life, She was the founder of the Inuit Youth Council movement and the International Youth Camp at Ikpik. She is a tireless campaigner for Inuit rights, both at home and abroad.

Our second speaker is Peter Ernerk, who is currently President of the Keewatin Inuit Association. He is also a Director and Executive Member of the Tungavik Federation of Nunavut. He is a former Member of the Legislative Assembly and a former Minister of Renewable Resources for the Northwest Territories.

The final speaker will be Andy Carpenter, who was born on Banks Island and grew up in Sachs Harbour. He is a very experienced white fox trapper. He was a member of the negotiating team for the Inuvialuit Final Agreement and is currently Chairman of the Inuvialuit Game Council.

Panel on "The emerging role of native organizations in wildlife management in Canada's North" (2)

INUVIALUIT INTERESTS IN WILDLIFE

A. Carpenter
Chairman
Inuvialuit Game Council

I am sure that this will be the first time many of you have had the opportunity to see this part of our country that we, the Inuvialuit, make our home. Our people have lived here a long time and wish to continue living here for an equally long time.

I'm Andy Carpenter. I live in Sachs Harbour, on Banks Island, which is about 2.5 h by plane across the Beaufort Sea from where we are today. Those of you who will have the opportunity to travel around and see this great country will find it very different from other areas of Canada with which you may be more familiar. It is a very large region. It has few people, and its settlements are very far apart. It is often thought of as an area very rich in wildlife. Some of you, if you fly over the land, may be disappointed not to see wildlife standing shoulder to shoulder. The fact is that our land is not nearly as productive as southern Canada. For example, this region requires about 5 km^2 of land to support one caribou. It is true that we have rich wildlife resources, but they can be sustained only because of the huge area of land available for them to occupy.

Perhaps one of the reasons I was asked to speak to you today on the issue of "The Emerging Role of Native Organizations in Wildlife Management in Canada's North" is that I am the Chairman of the Inuvialuit Game Council, one such native organization. The Game Council was set up as an Inuvialuit organization under our land-claim settlement, which was passed in 1984. It was set up to represent the collective Inuvialuit interests in wildlife. Our interests include wildlife management, environmental protection, and our Inuvialuit hunting rights. We have representatives on the Game Council from the six communities' Hunters and Trappers organizations that make up our settlement region.

The Inuvialuit Final Agreement

Perhaps some of you might not understand why our land-claim settlement negotiated wildlife matters at all. Although we are as yet the only native group to have completed its land-claim settlement in the Territories, I think the other native groups might well find a lot in common with the Inuvialuit objectives, although they may seek other means to achieve them. I think all of the other native land-claim settlements, in both the Yukon and the Northwest Territories, will involve substantial wildlife-related provisions.

The Inuvialuit Final Agreement, which resulted from 10 years of negotiations with federal and territorial governments, sets out the basic principles or objectives as follows:

- to preserve Inuvialuit cultural identity and values within a changing northern society;
- to enable Inuvialuit to be equal and meaningful participants in the northern and national economy and society; and
- to protect and preserve the Arctic wildlife, environment, and biological productivity.

Clearly, the future survival of the Inuvialuit as inhabitants of the western Arctic is intimately tied to the maintenance of the wildlife resources and the environment. We are entering a new era in Canada's North, where non-renewable resource development such as oil and gas presents new opportunities and challenges, and the Inuvialuit naturally wish to be involved and diversify their interests. However, the Final Agreement is designed to provide the means for the Inuvialuit to always protect the wildlife and environment for their future generations. The security of our livelihood will depend upon the wildlife resources, as it did in the past and likely will in the future after oil and gas are gone.

We will always depend on wildlife for food. If anyone thinks this is nothing more than a romantic notion, try to buy fresh milk, eggs, or a beef steak in any of our communities--you will appreciate that there are significant economic factors involved. It is generally known that we prefer the food produced on our own lands and in our own waters. That is perhaps a good thing. There is reasonable medical evidence to suggest not only that our foods are healthier, but also that native people suffer serious medical problems when subjected to a southern, sugar-rich diet. Therefore, the wildlife resources are essential to our survival.

To understand why the Inuvialuit dedicated so much of their attention to wildlife matters in their land-claims negotiations, one has to understand the circumstances prior to our land settlement. The Northwest Territories is a vast region--4 million square kilometres, with several very distinct regions with respect to both wildlife and people. The territorial government administrative centre was Yellowknife. It had adopted a provincial style of wildlife management, i.e., management employing enforcement and legislation and using wildlife-management models from southern Canada with a primary reliance upon "professional" advice. Our perspective of the situation was that because of the sparse population, enforcement did not work in remote locations; the legislation was inappropriate, and wildlife-management models did not suit the populations that we were dealing with; and the "professional" advice appeared remote and ill-informed. The observations and knowledge of the Inuvialuit who had lived with and depended upon these animal populations often differed with the "professional" advice and therefore was usually ignored by the managers and legislators.

They seemed to have the concept that the wildlife resources were their personal property and the harvesters were the robbers of their resources and could be controlled only with more laws and more enforcement. We, on the other hand, viewed the managers and legislators as a bunch of little dictators who did not know what they were talking about.

On another front, both the wildlife managers (whom I have said so many nice things about) and ourselves faced the common problem regarding protecting habitat. While the Government of the Northwest Territories (GNWT) and the Yukon Government had wildlife-management responsibilities, the federal government, through the Department of Indian Affairs and Northern Development (DIAND), had control of environmental and developmental issues. Through the 1950s and 1960s, DIAND granted exploration rights to oil and gas companies throughout most of the onshore and offshore areas of our region. When these companies began conducting the exploration that was required within their permits, DIAND had no means of controlling the activities to protect the wildlife, the habitat, or the harvesters. Early atrocities resulted in bitter confrontation between the communities and the developers, the first of which occurred on Banks Island, in my home community. Later, DIAND brought in land-use regulations that gave the appearance of control and therefore protection, but the department had a fundamental conflict. It was supporting the exploration and development at the national level, while having a conflicting responsibility for protecting native people and the Northwest Territories. Of course, in this adversarial situation, everyone suffers, including the wildlife populations.

Perhaps this background will help you understand the thinking behind the specific principles governing the wildlife harvesting and management section of our Final Agreement:

(1) A basic goal of the Inuvialuit land-rights settlement is to protect and preserve the Arctic wildlife, environment, and biological productivity through the application of conservation principles and practices.

(2) In order to achieve effective protection of the ecosystems in the Inuvialuit settlement region, there should be an integrated wildlife and land-management regime, to be attained through various means, including the co-ordination of legislative authorities.

(3) It is recognized that it may be desirable in the future to apply special protective measures under laws, from time to time in force, to lands determined to be important from the standpoint of wildlife, research, or harvesting. The appropriate Ministers shall consult with the Inuvialuit Game Council from time to time on the application of such legislation.

(4) It is recognized that one of the means of protecting and preserving the Arctic wildlife, environment, and biological productivity is to ensure the effective integration of the Inuvialuit into all bodies, functions, and decisions pertaining to wildlife management and land management in the Inuvialuit settlement region.

(5) The relevant knowledge and experience of both the Inuvialuit and the scientific communities should be employed in order to achieve conservation.

The situation has changed drastically in the Northwest Territories over the last decade, partly perhaps as a result of our land settlement, but certainly because there has been a significant change on the part of the territorial government's attitude towards its renewable resources and the harvesters. We see in our situation a genuine desire for government to work with the harvesters and their duly-appointed representatives to achieve better wildlife management. A new era of co-operative management has been initiated. Much of the control and responsibility has been transferred to the local level (the Hunters and Trappers committees in each of our communities) and the regional level (the Inuvialuit Game Council). Within our settlement, governments do retain an overriding responsibility for conservation. The principles I have mentioned before, in terms of the land-claims settlement, have started to be put into practice, and we feel optimistic that they will be successful in contributing to effective wildlife management within our region.

Role of Inuvialuit organizations in wildlife management

Perhaps I might give you some practical examples of how we, and the Government of the Northwest Territories, go about some of the details of managing our wildlife. I use the GNWT as one example, probably because we are farther ahead in our working relationship with them than with the other jurisdictions, such as the Yukon, Fisheries and Oceans Canada, and the Canadian Wildlife Service (CWS), which we expect will catch up in the near future. There appears to be a great deal of goodwill, co-operation, and enthusiasm on all sides.

On an annual basis, and more often if necessary, the Game Council meets with representatives of the Department of Renewable Resources to review the status of the wildlife populations or our knowledge about them, and to determine the long-term and short-term research priorities or other management actions that may be required. Often our priorities reflect the degree of concern we have about any wildlife population. We design our research to supply the information we both will require to make sensible management decisions together. Where situations regarding animal populations warrant, we decide together what restrictions should be placed on the harvesting. Although many such situations have been discussed, we have always had a meeting of minds. Should any restrictions be thought to be required, it becomes the Game Council's and the Hunters and Trappers' responsibility to put these into place. If a population is shared among a number of communities, the Game Council is responsible to allocate any harvest quotas between such communities, and it becomes the Hunters and Trappers' responsibility to allocate any community quotas to their members.

Other examples of the roles of the Inuvialuit organizations in wildlife management within our region include the regulation of all aspects of Inuvialuit harvesting, such as the numbers, the areas, and the methods of harvest. In addition, the Inuvialuit organizations are responsible for the regulation of everyone's harvesting, permitted by law, of certain important species, such as furbearers, muskox, and polar bears.

Under the terms of the Final Agreement, our Game Council also has a role to play in international wildlife agreements, both existing and future. With respect to existing laws, we, together with our governments, are seeking amendments to the Migratory Bird Convention to permit the spring hunting of geese in this area. I am sure you are all aware of the details of this issue. In the western Arctic, we are very anxious to see this Convention changed to remove a legal impediment to an important activity among Inuvialuit. In addition, we, together with the GNWT and CWS, have a keen interest in seeking amendments to the U.S. Marine Mammal Protection Act to permit marine mammal products to be exported there. This would greatly assist our communities in developing their renewable-resource economy. With respect to caribou, the Inuvialuit, primarily through their land-claims negotiations, were instrumental in concluding an agreement on management of the Porcupine caribou herd within Canada involving both territories and three native groups. As a result of this domestic agreement, work proceeded with all the parties to secure an international agreement on the herd. This should be completed in the near future.

The Game Council has proceeded to work closely with the Alaskan/North Slope wildlife-management organizations and agencies on a number of shared wildlife populations. We have concluded the first stage of an agreement on the management of the polar bear population that is common to both countries. We are optimistic that this agreement will greatly improve the management of a very valuable resource.

Another initiative our Game Council and Hunters and Trappers are pursuing is the development of our renewable-resource economy based on the wildlife resources. I know that similar issues are facing several of the provinces. There are, however, several significant differences. The first is that most of our communities are situated where they are because they are close to wildlife resources both for food and for their traditional commercial harvesting, such as trapping and sealing. We know what has happened to sealing and the impact this has had on those affected communities. We know the pressures that are coming with respect to trapping. In order for many of the communities to survive, we feel we must commercially develop new wildlife resources, recognizing, of course, that the conservation of the resource and the maintenance of the subsistence food supplies are our first priorities. Should we be successful in developing a renewable-resource industry, our livelihood will, to an even greater degree, be dependent upon successful wildlife management. We simply could not afford to repeat the experience in commercial harvesting that we have seen in such areas as the east and west coasts' fishing industries. We require knowledgeable and responsive management systems.

We initiated the development of the renewable-resource industries through our Renewable Resource Economic Development Project which is directed by representatives of the Game Council and the departments of Renewable

Resources and Economic Development of the Government of the Northwest Territories. This organization was set up this way in recognition of the fact that the task could be successful only if everyone with an interest worked together towards the long-term goals. To date, we have developed our guiding and outfitting enterprise through our company, Guided Arctic Expeditions, and the Hunters and Trappers committee in each community; today they are bringing in $1.5 million annually to our region, and most of this goes right to the Hunters and Trappers in the communities.

Another example is our commercial meat harvest of muskox on Banks Island, where large numbers of muskox are posing a potential wildlife-management problem. We are working towards having the harvest and the processing facility, ULU Foods, federally inspected in order that you, in your home provinces, can enjoy one of the finer game meats produced in Canada. Those of you who went to Expo may have sampled the muskox burgers of the GNWT Pavilion: those came from Banks Island.

I hope by these few examples to show that the Inuvialuit, in a very short period of time, have developed a new role in wildlife management. We started in a position of being reactive to government initiatives because we did not have a recognized or effective role in developing them. We are now a few years into a pro-active role, often being the initiators and always being the advocates for sound conservation and management of wildlife and protection of the environment. We are comfortable in this role, and we certainly appreciate the support and assistance that the governments have given us. It is satisfying today to see the recognition of common goals and values among the native organizations representing the wildlife harvesters and the government wildlife managers. The vision of the land-claims settlement was that they both, by working together, could succeed in maintaining the renewable resources and a way of life that depends upon them that neither could achieve separately.

Panel on "The emerging role of native organizations in wildlife management in Canada's North" (3)

THE EMERGING ROLE OF NATIVE ORGANIZATIONS IN WILDLIFE MANAGEMENT IN THE NORTH

Rhoda Innuksuk
President
Inuit Tapirisat of Canada

The Inuit Tapirisat of Canada (ITC) is the national organization representing Inuit in Canada. At our recent annual meeting in Iqaluit, it became very clear that Inuit still have many concerns about wildlife and wildlife management in the North. One-and-a-half days of our 6-day meeting were spent on wildlife issues. Inuit repeatedly expressed their concern to ITC about wildlife research and management practices and about the need for Inuit to be involved in these areas because they depend on wildlife. A resolution was passed by the ITC Annual General Meeting which called on ITC, in consultation with other Inuit organizations, to formulate a policy on wildlife research. A policy will help, but we need more practical steps too.

To understand the role that is emerging for native organizations in wildlife management, it is important to understand that there are many different Inuit organizations with interests in wildlife and with mandates to work for Inuit.

At the community level, there are Hunters and Trappers Associations (HTAs). I would like to mention that these HTAs were started with the help of ITC many years ago.

There are also regional hunters and trappers organizations, as well as regional political organizations, economic development organizations, and land-claims organizations, all of which have a stake in wildlife and a responsibility to Inuit. I expect you will hear some of their viewpoints from other speakers this morning. The hunters and trappers at the community level must be involved directly with wildlife scientists and managers in the field. Other levels of Inuit organization must support the involvement of hunters and trappers in research and management by lobbying government, industry, universities, and others to ensure that hunters and trappers get the opportunity to participate. Land-claims groups are working towards settlement agreements that will ensure this participation through legislation.

As a national organization, ITC is lobbying to educate government, industry, universities, and others about the need to consult and include Inuit in wildlife management and research.

It is our view that only by including Inuit as equal partners in management and research can wildlife resources be managed effectively to ensure long-term benefits to people and to wildlife in the North. For this reason, we support the concept of co-operative management and co-operative research, and are actively working to get this concept accepted by those in government and elsewhere who have the power to make it happen. We would like to hear from anyone present who is interested in working on the concept of co-operative research and on specific research projects with Inuit involvements. In this way, we hope to build a framework of shared experience between Inuit and non-Inuit, so that a common understanding and language of wildlife management can develop.

The best future for wildlife in the North is the one where hunters, managers, and researchers work together. It is the role of ITC to facilitate this co-operative approach, by supporting other Inuit organizations in their roles, by supporting the involvement of hunters and trappers from the communities, and by encouraging government and other interested parties to include Inuit as partners in management and research.

We would like to see a pilot project in co-operative wildlife research put in place with participation of government, industry, universities, and Inuit, so that we can all begin to work together for the future of wildlife in the North now.

Panel on "The emerging role of native organizations in wildlife management in Canada's North" (4)

INUIT AND WILDLIFE MANAGEMENT

P. Ernerk
President
Keewatin Inuit Association

I wish to thank the Government of the Northwest Territories for inviting me to speak on the Inuit involvement in wildlife management.

Inuit have always been dependent upon wildlife. Our cultural and economic survival depends on the availability of abundant and healthy stocks of wildlife. At one time we harvested and managed wildlife according to our own view of wildlife and conservation. Over time, however, our way of managing has been eroded to the point that today we have very little say in any of these matters. Of equal concern to us is our lack of input into other matters that have a very direct bearing on the health of the stocks--such as decisions regarding the approval and operation of industrial operations and transportation projects, and decisions regarding the establishment and operation of national parks and conservation areas.

Our knowledge of the environment and resources has been downplayed, and our lack of scientific training has been cited as a reason for excluding us from a meaningful role in management. Decisions on resource management in the North are often designed more to meet the needs of industrial developers, commercial wildlife operators, and sport hunters than to meet our needs or those of wildlife. In some instances, even the concerns of conservationists, environmentalists, and animal-rights activists have received greater consideration than our needs.

Wildlife, as I have said many times in many other forums, is an economic resource and must be regarded as such. It is the primary economic sector of our society and must be managed and protected with this as the focus. Resource development and the environment must be managed in a manner that complements this objective.

The concern for wildlife and the environment--its use, conservation, protection, and management--should be the basis for guiding all resource-related decisions in the North. It has been this philosophy that has guided the approach that Inuit negotiators have taken to the land-claims table. We have been negotiating a comprehensive and rational system of resource management and decision-making. When I say "comprehensive," I mean a complete system of management to deal with all aspects of resource use and development throughout the entire area of Nunavut, including the inland waters and the offshore.

As well, in order to protect the ecological balance of Nunavut and adjacent lands, we have negotiated overlap agreements with our aboriginal neighbours to ensure that through integration of the respective claimant groups, management systems can occur in areas of overlapping land use.

Our negotiations have been ongoing for more than a decade. It has been a long, hard struggle because we have been resisted by government every step of the way. Government has always been willing to strike a quick land-and-cash deal. It has for the most part, however, been loathe to give us any significant role in management and decisions affecting resource use and development.

Nunavut Wildlife Management Board Agreement-in-principle

A case in point is our Nunavut Wildlife Management Board Agreement-in-principle, which we concluded over an intensive eight-month period of negotiations in 1981.

There is a real need to implement this agreement. Since it was initiated, we have seen the establishment of two caribou management boards, and three independent and unrelated harvest studies took place in our regions (even though our agreement provides for a Nunavut-wide 5-year harvest study). We have also seen an Inuit-initiated interim Wildlife Management Agreement between the Northwest Territories and Northern Quebec Inuit concerning Hudson Bay, two Convention on International Trade in Endangered Species (CITES) conferences, a Royal Commission on the sealing industry, an Aboriginal Affairs Standing Committee report on the fur industry, as well as a continuous attack on the trade. In spite of the significance of these issues, all of which could be dealt with in some fashion, at least in part, through our wildlife agreement, they continue to be dealt with through a piecemeal and ad hoc system.

What is so offensive about implementing our agreement-in-principle? What is so offensive about our wildlife agreement? Why is it taking so long to complete the remaining complementary pieces of our proposed management system? I can see no reason except for a lack of political will by government and a continuous reluctance to turn over some measure of control to the people most affected by resource-management issues.

I can only conclude that government's reticent attitude is driven by an unfounded fear that its ability to make northern policy and decisions will be unduly compromised. All we have proposed is that we be cut into the decision-making process, and that management decisions be made according to a rational process.

The agreement recognizes Inuit rights to harvest all flora and fauna throughout Nunavut, including the offshore. It provides for the establishment of a Nunavut Wildlife Management Board in which Inuit and government managers participate as equals in the decisions of the board. The board is composed of four Inuit and four government (two federal and two territorial) appointees and has an independent chairman.

The board's powers and responsibilities will include such matters as the setting of quotas, habitat protection, research, a 5-year harvest study to determine an Inuit basic-needs level of harvest, the adjustment of the basic-needs level to accommodate increased harvest needs, the establishment and operation of sanctuaries, the allocation of resources for commercial operations, habitat classification, research, and Inuit training in wildlife management.

Because Inuit share resources with Greenlanders and Alaskans, the agreement provides for government consultation with Inuit prior to the formulation of any Canadian position on international wildlife matters. Within Canada, the agreement provides that government cannot enter into any interjurisdictional agreement that will conflict with the agreement.

This agreement provides a number of changes to the status quo. In the first place, it recognizes that the primary purpose of land-use planning is to protect and promote the existing and future well-being of the permanent residents and communities of Nunavut, taking into account the interests of all Canadians, rather than the reverse, which has been the thrust of most federal policies. Second, it establishes a land-use planning process that is equally applicable to the sea and to the land. Third, it recognizes the role of Inuit and the residents of the region in determining the future of the region. Fourth, approval of the plans requires the consent of both the federal and territorial governments, rather than just the federal government. And fifth, the land-use planning process will be a legislated process (something that is currently lacking in the Northwest Territories), by virtue of the fact that it will be established under the settlement legislation.

Because Inuit are in many ways a maritime people, and because the health of the marine environment turns in large measure on the state of the terrestrial environment, Inuit have proposed the application of their land-based agreements to the offshore in order to ensure an integrated land and sea management system. We have proposed that these agreements apply throughout the waters and in the areas in which Canada has jurisdiction under international law.

As you can see from this brief overview, we are proposing a rational and comprehensive system of resource management for Nunavut. It is reasonable, workable, and necessary. It is aimed towards environmental protection, but not to the exclusion of development. It protects our rights as aboriginal peoples, yet includes all residents of Nunavut in the planning and review of development. It weeds out those projects that are unacceptable on the basis of fact and evidence, and permits those projects to proceed that are deemed to be environmentally and socio-economically acceptable. And it complements the wildlife-management system because of its focus on environmental and socio-economic concerns. The integration of the wildlife and land- and resource-management provisions is our assurance that there will always be wildlife around for us to hunt.

Panel on "The emerging role of native organizations in wildlife management in Canada's North" (5)

DISCUSSION

Jim Bourque (NWT Department of Renewable Resources): I believe that the whole concept of co-operative management of wildlife in the Northwest Territories began in a schoolhouse in Sachs Harbour about 18 years ago, and to some degree in the community hall in Tuktoyaktuk. I am pleased to see wildlife management has evolved as far as it has in a co-operative spirit. We fully support the concept that boards and public institutions should be involved in wildlife management. We were very disappointed when the federal government did not recognize the Nunavut Agreement-in-principle and provide some resources to put that board into place. We have, as a territorial government, provided resources to the Inuit of Kitikmeot, Keewatin, and Baffin to meet at least once or twice a year to discuss wildlife issues, and that is pre-empting the final agreement on the claim. We are at present putting together a board for the management of renewable resources in the Dene-Métis area. There is no agreement signed yet, just initialed, but we believe that co-operative management is important enough to pre-empt the final agreement and channel some resources towards setting up a board so we can start to work together.

I also want to make a statement here that may raise concern in some sectors--I really believe that the only way that we are going to preserve the habitat, the environment, and wildlife in our part of the country is to put it in the hands of native people--they have the greatest vested interest in keeping the environment clean and in maintaining wildlife populations. We will probably look back 50 years from now and realize how fortunate we were to decide to go into co-operative management. This is the goal of our department, and we are going to pursue it as vigorously as we can in the next few years.

Peter Ernerk (Tungavik Federation of Nunavut): We have no problems with the issue of national co-operative efforts, but there is a problem, on the part of the Government of Canada, when it comes to renewable resources, the marine mammals that we use, and international co-operative scientific studies. For example, during the meeting of the International Whaling Commission in February 1986, we put together a resolution calling on the Government of Canada, the Government of the United States, and the State of Alaska to do a co-operative study with regard to the Bowhead population, because the Government of Canada had absolutely no idea about the Bowhead population once it enters the Beaufort Sea. We wanted a co-operative study so the Inuit, the Government of Canada, and the Government of the Northwest Territories could have a better idea about the population of the Bowhead in these Arctic waters. I think we have to go beyond the issue of national co-operative efforts to other countries, such as the United States (e.g., State of Alaska) and Greenland.

Ken Brynaert (Executive Vice-President, Canadian Wildlife Federation): I am rather surprised that no one raised the subject of the protocol to amend the Migratory Bird Treaty, signed in Ottawa 9 years ago. Is there any concern on the part of any of your organizations that this has not been accomplished and that you are still placed in a position of taking migratory birds illegally under the terms of the treaty?

Peter Ernerk (Tungavik Federation of Nunavut): We are taking birds illegally in many sectors of the Northwest Territories because the regulations are totally ridiculous. We have made some representations at the highest levels of international governments. For example, I recall a meeting in 1972 in Cambridge Bay at which we asked President Nixon, the Prime Minister of Canada, and the President of Mexico to make some changes to the act. We have had no reaction to any of our representations.

Tony Clarke (Director General, Canadian Wildlife Service): I would like to say that my organization agrees with everything we have heard from this panel. I see no conflict of objectives or interests at all. We work closely with the Northwest Territories with respect to migratory birds. Other wildlife, of course, is under the jurisdiction of the Northwest Territories and the Yukon Territory. We work with those organizations on international matters, where we can help. I know that through the land-claim settlements we will work with the native organizations in co-management of wildlife resources. Co-management and the sharing of management with native organizations, such as the Tungavik Federation of Nunavut (TFN), is absolutely coincident with our objectives. I wanted to go on the record to say this. The Canadian Wildlife Service is a very small but very vibrant organization. We will all deliver (but mostly through local organizations) wildlife management, particularly migratory-bird management.

I am going to follow up on the pilot project for wildlife research in co-operation with the Inuit. I will talk to Rhoda Innuksuk about this.

I would like Peter Ernerk to tell me about any problems that he has. I want to point out that the question of disallowance with respect to the wildlife agreement-in-principle with TFN was a subject that has been on-going for many years. There was lack of successful resolution of that issue through many ministers and many deputy ministers. If it is any indication of our willingness or a new change of attitude in Ottawa, you will recognize that disallowance was not a factor anymore last year. I think that was a major breakthrough.

There are preliminary discussions going on on the protocol between government representatives. I know there has been concern expressed by native groups that they want to be involved in all of this so that their thoughts and ideas can be incorporated into any Canadian position. We agree that native people must be involved. Some of us are trying to get something on paper in a very preliminary fashion so that at least we can begin to consult with native groups. They may or may not agree with this approach, but they can be assured that nothing is going to happen on the protocol without their input.

Peter Ernerk (Tungavik Federation of Nunavut): I know that there are various departments that agree with the early implementation of an Inuit Wildlife Management Board, including Environment Canada, Fisheries and Oceans, and the Government of the Northwest Territories. However, we have a problem with Indian Affairs. We met with Mr. McKnight about three and a half weeks ago in Ottawa and stressed again a need to implement the Nunavut Wildlife Management Board as quickly as possible.

Herman Schwenk (Representative, Unifarm): I am a farmer, and I sit on the Alberta Fish and Wildlife Advisory Council. This is my first time up to this area. Yesterday I had the opportunity to go to Holman and Sachs Harbour and become acquainted with the nature of the country, the nature of the people, and the problems that they face on an everyday basis. Most people where I live do not really understand the native land-claims issue, and I want to say that we need to explore more ways of communicating and expanding our knowledge so that we understand native peoples and native peoples understand us. If we do not understand the problem there will be no political will. We need a lot more dialogue if we are going to make progress, because wildlife is extremely important to the livelihood of the people here. Those of us in the South probably do not have an appreciation of the extent of that importance, even though I am a man of the land myself and I know how important the land is and how important are the policies that are developed that affect me. The same thing applies here.

Joe Bryant (Session Chairman): Perhaps the fact that this session has taken place will give some incentive to its happening again and again, to help bridge the gap between the two groups.

Charles Drolet (Quebec Region, Canadian Wildlife Service): Over the past 12 years I have been trying to implement the benefits of the James Bay and Northern Quebec Agreements. I have summarized my experience and others' experience in implementing this agreement in a recent paper presented at the North American Wildlife Conference. There have been very important shortcomings. Boards, such as the Hunting, Fishing and Trapping Coordinating Committee, are not necessarily the ultimate answer to all problems. I found that the accomplishments that were realized outside of the formal board may have been of more significance than what was happening inside the formal structure.

For example, a joint management plan has recently been devised to look after the conservation of the Beluga whale in northern Quebec. This management plan was arrived at through the collaboration of Fisheries and Oceans, Anguvigak, and Makivik Corporation, based on data that were jointly collected by the Inuit of northern Quebec and Fisheries and Oceans. The management plan involved self-imposed regulations by the Inuit people and certainly was an answer to the problem of conserving the Beluga whale in northern Quebec. The difficulty of implementing the James Bay Agreement was also summarized in a symposium held in Montreal in 1985, called

"James Bay Agreement, Ten Years After." I do not think that the results of the symposium were published, but I hope they will be soon. The data and the interventions made at that symposium were of great significance for those who want to devise and implement agreements such as the James Bay and Northern Quebec Agreements.

CONFERENCE SUMMARY

A review of the workshop discussions and presentations of the conference speakers reveals a list of common concerns. The various concerns were priorized based on the number of workshops and conference speakers identifying a concern. The two primary concerns were:

- the need for wildlife managers to better communicate with others; and

- the need for sustainable use of wildlife.

Six of the nine workshops and four of the eight speakers identified these two concerns. Of secondary importance were three concerns:

- the influence of social and cultural factors on wildlife-use practices;

- the need to develop co-ordinated mechanisms for wildlife management; and

- the need for economic valuation of wildlife.

Five of the nine workshop sessions identified these three concerns. Four of the eight conference speakers identified social and cultural factors and economic valuation of wildlife as important, and two speakers identified the need for co-ordinating mechanisms. Of tertiary importance were two concerns:

- the importance of co-operative management; and

- the need for public support.

Four of the nine workshops and three of the eight conference speakers identified these two concerns. International factors were also identified as a concern by four of the nine workshops and two of the eight speakers.

Each of these concerns was addressed by Tom Beck in his summary remarks. Tom prefaced his remarks by pointing out that he had much optimism for the future of wildlife in Canada, but that in order to ensure the future the concerns identified during the conference, both in the workshop sessions and by the conference speakers, must be addressed. An effective partnership is needed not only among the agencies involved in wildlife management, but also with non-governmental organizations, the public, and other resource sectors. Without this partnership, there will be continued erosion of wildlife values and management effectiveness. A summary of Tom's remarks regarding the concerns identified in the workshop sessions is provided below.

Communication

Several mechanisms were identified for improving communication among the agencies and organizations involved in wildlife management, the public, and the media, including the following:

- creation by CCREM of a national information system on contaminants affecting wildlife;
- acceptance by CCREM of the responsibility for improving the curricula for environmental education (Workshop 4); and
- the need to develop a communication strategy (Workshop 9).

Tom pointed out that wildlife management is still very much a closed shop, in many respects similar to the oil industry, which does things in isolation and then wonders why the public image of the industry is poor. Tom urged that wildlife managers "open up" and invite other resource sectors and the public to participate, as there is little to lose and much to gain by expanding the wildlife partnership.

Sustainable use

Tom pointed out that the adoption of sustainable use by most agencies and organizations, such as the Canadian Wildlife Federation and the Fur Institute of Canada, augured well for the future of wildlife.

Social/cultural

Tom urged that the recommendations developed by Workshops 1 and 6 regarding the importance of social and cultural factors in wildlife decision-making be adopted.

Co-ordinating mechanisms

Two workshops identified the substantial need for co-ordinating mechanisms to better manage wildlife. Workshop 4 urged that CCREM create a national panel on sustainable development. Workshop 7 identified the need to better integrate federal and provincial policies in order to effectively allocate federal expenditures and programs. Tom urged that co-ordinating mechanisms be explored more fully.

Economic valuation of wildlife

Workshop 7 examined many of the mechanisms available for raising money for wildlife research and management. Tom pointed out that the valuation of wildlife is a recurring subject, yet it has failed to be fully addressed.

He suggested that consideration be given to placing a value on habitat, even though the Crown may not own the habitat acreage. Tom went on to point out that even though the oil and gas industry does not own land, this has not prevented it from making deals on acreages. The industry establishes partnership and trades in acreages even before oil or gas is discovered.

On another aspect, Tom pointed out the irony of a piece of paper depicting a mammal or bird and signed by a well-known artist, such as Robert Bateman, bringing $50 000 to the artist, yet the animal itself is not considered to be worth as much. Tom concluded by strongly recommending that there be real resolve to determine the economic value of wildlife.

Co-management

Both Workshops 1 and 2 identified the need to "open up" wildlife management to include the public. Workshop 1 suggested that both groups and individuals should be allowed to participate as full partners, from collecting wildlife data to management decisions. Workshop 2 urged that user groups should have the opportunity to decide wildlife-quota allocations and uses. Tom reminded the delegates that they have a long-standing record in various forms of co-management, including the past and present efforts of Ducks Unlimited, one of the oldest partners in co-operative management and one of the most innovative.

Public support

Workshops 4, 7, and 9 discussed the need for public support. Tom stressed that the interest and power of the public should not be underestimated. As an example, he used the effect that the people of Tuktoyaktuk and Sachs Harbour, notably John Steen, Nellie Cournoyea, and Andy Carpenter, had on changing the economics of the oil industry in the late 1960s and early 1970s, in recognition of the value of wildlife. Industry operating seasons onshore were cut in half and limited to winter to avoid habitat damage.

International factors

International factors were discussed at length in Workshop 5, as well as the effect that international agreements can have on wildlife-management programs in Canada. Norma Kassi of Old Crow also identified, in her keynote speech, the concerns that the people of Old Crow have about international factors beyond their control. Tom pointed out that international factors will have to be given more consideration in the future, as we become smaller globally and international agreements assume greater importance.

Conclusions

Tom concluded his remarks by indicating that the blueprint for "Wildlife: Agenda for Tomorrow" already exists within present and future partnerships. For example, many of the elements required to make the blueprint a reality, such as currently co-operative management practices, already exist. What will be needed is the resolve to implement the blueprint that is developed. Tom wrapped up his remarks by pointing out that if wildlife managers do not effectively address the concerns raised at this and other conferences, others will.

Report

NORTHWEST TERRITORIES DEPARTMENT OF RENEWABLE RESOURCES

The Wildlife Management Division of the Department of Renewable Resources has broad responsibility for wildlife and habitat management in the Northwest Territories (NWT), power transferred under sections of the Northwest Territories Act. The department works closely with federal, provincial, and territorial departments and agencies and wildlife users in the management of the environment and renewable resources in the North.

Wildlife-population management

Caribou

Visual and photographic survey results on the Bathurst caribou herd indicate a continued increase in numbers and a population of over 480 000 animals. The radio telemetry project, which began in 1984, continued on the Kaminuriak and Wager caribou. This project will help to verify the locations of calving caribou and to monitor their movements. A photographic post-calving survey was conducted on the Bluenose herd in the summer of 1986 with the aid of the radio collars placed on Bluenose caribou in the fall of 1985 and spring of 1986. The total population of the Bluenose herd was estimated to be 97 000 animals.

Recruitment studies conducted in the spring of 1987 indicate good to very good recruitment in the four major mainland caribou herds.

Ten satellite transmitters were placed on caribou on western Victoria Island to determine annual movement patterns and calving areas and to document any movement between Victoria and Banks islands.

New commercial caribou quotas were granted this year for the Bathurst herd and were increased on Victoria Island.

Polar bear

Studies continued on the polar bear populations in the Beaufort Sea and Foxe Basin. The Foxe Basin study is in conjunction with Manitoba and Ontario, which are conducting studies in Hudson Bay. The Beaufort Sea study is being conducted in co-operation with the Canadian Wildlife Service, the Yukon Territorial Government, and the US Fish and Wildlife Service. Radio telemetry is being used to define these populations more accurately.

Research into the use of tetracycline in marking bears was started in the Churchill area in co-operation with the Canadian Wildlife Service, Manitoba, and Ontario. This research will continue this year.

A number of revisions to the polar bear regulations have been proposed, and consultation with regional Hunters and Trappers organizations is under way. A management plan for polar bears across the NWT is being drafted.

Raptors

The focus of the Raptor Project continues to lie on Gyrfalcons. Banding and production surveys of Gyrfalcons were carried out in the central and eastern Arctic. A study of Gyrfalcon food habits and nesting behaviour continued in the Kitikmeot region.

The status of the Anatum Peregrine Falcon is being monitored in the Mackenzie Valley, and the species is showing a marked recovery.

Muskox

Surveys of muskox populations conducted in 1986-87 indicate that the recovery and expansion of the species is continuing. A survey conducted in the Bathurst Inlet and Contwoyto Lake area resulted in an estimate of over 3000 muskox. A survey conducted in central Keewatin estimated the population at 820 muskox.

Radio collars placed on 20 muskox on Banks Island in 1986 were monitored over the year. No major movements were evident.

Bison

A bison ecologist was hired in 1987 to enhance the program for bison management in the NWT. An aerial survey of the Mackenzie Bison Sanctuary in April 1987 located over 1600 wood bison. The range of the population also expanded into the Mills Lake area. Habitat and productivity studies continued on the bison range. Twelve wood bison were radio-collared in the Mackenzie herd in 1986-87 to investigate habitat use and dispersal. Three wood bison were also radio-collared in the Nahanni herd to investigate movements and mortality factors. A management plan for the Mackenzie bison herd has been prepared and will be released in the summer of 1987.

Waterfowl

The waterfowl program initiated a study of the sex and age of waterfowl taken in the spring harvest on the Tuktoyaktuk Peninsula. This study will be expanded, with the assistance of the Canadian Wildlife Service, to include the breeding status of the harvested birds. The Tuktoyaktuk Hunters and Trappers Committee has provided valuable support for this program.

Preliminary surveys were conducted in the central Arctic for White-fronted Geese, Canada Geese, Brant, and Tundra Swans. Two intensive studies will start in 1987 to determine the reproductive success and survival rates of these species in the central Arctic.

The waterfowl ecologist chaired the Arctic Geese Scoping Committee for the North American Waterfowl Management Plan Committee. The scoping committee produced two reports: "Information Needs for International Management of North American Geese and Swans" and "Recommended Schedules and Estimated Costs for Various Joint Venture Tasks."

Sheep

Studies of the seasonal distribution of Dall's sheep continued in the Richardson Mountains in co-operation with the Yukon Government. Aerial surveys of Dall's sheep populations were conducted in the Mackenzie Mountains north of Nahanni National Park and in the Nahanni range. These surveys indicated that the populations are healthy, with good lamb production.

Moose

Surveys of moose populations conducted on the Slave River lowlands and in the Liard River valley in November indicated moderate to low moose densities, but good calf production. Composition surveys conducted in these areas in March indicated good calf survival through the winter. The study of moose population ecology in the Norman Wells development area continued, using radio collars to monitor habitat use and calf survival.

Wolf

Studies of wolf movements in relation to the Bluenose caribou herd were started in 1987 using radio telemetry. A study of wolf food habits, denning behaviour, and pup survival will start on the Bluenose caribou range this summer.

Harvest studies

Native harvest studies have been set up in the eastern and central Arctic, and arrangements are being made to set up harvest studies in the rest of the NWT. Obtaining good data on the harvest of wildlife will help to identify opportunities that may be developed in the renewable-resource economy.

Wildlife-habitat management

A program to identify, delineate, and describe Wildlife Conservation Areas in the NWT continued in 1986-87. The goal of this program is to produce a list of Wildlife Conservation Areas that will require some form of special management. This project will assist the department in responding to nonrenewable resource development and in fulfilling its role in land-use planning. A report will be completed in 1987-88.

In association with the Canadian Wildlife Service, a management plan for the Polar Bear Pass National Wildlife Area is being developed.

Satellite imagery was used to classify and map habitat types in the Mackenzie Wood Bison Sanctuary. This work is part of a general habitat survey of the area to delineate habitat selection and forage production. In addition, potential wood bison transplant sites were evaluated and will be documented in a report to be released in 1987.

The wetlands classification program initiated last year continued in 1986-87. The goal of this program is to develop, test, and implement a system for the classification of wetlands in the NWT. This project is being conducted in co-operation with Ducks Unlimited and Wildlife Habitat Canada.

A biophysical inventory and analysis of Auyuittuq National Park Reserve on Baffin Island, initiated in 1985, continued in 1986-87 and will continue through 1987-88. This project is one component of a program designed to facilitate the completion of an ecological overview, which will be used in the development of a management plan for the park. This program is sponsored by Parks Canada, Prairie Region.

The "Safety in Bear Country" program was continued in 1986-87. As part of this project, the training program was continued in 1986-87. The department has received numerous requests for "Safety in Bear Country: A Reference Manual." Research and development of an effective 12-gauge plastic slug continued, and the results are encouraging.

The department sponsored the "Bear-People Conflicts: A Symposium on Management Strategies" on 6-10 April 1987 in Yellowknife. The proceedings will be published in 1988.

The raptor-habitat inventory project was continued in 1986-87, using aerial photography and LANDSAT imagery to help locate potential populations of raptors and also to identify areas that may need protecting.

The barren-ground grizzly bear habitat program initiated on Richards Island in the Mackenzie Delta continued in 1986-87. Bears equipped with radio collars were monitored for movements, habitat use, and denning locations.

The section continued to be involved in environmental assessment projects, including a raptor monitoring program along the IPL pipeline in the Mackenzie Valley, review of land-use permit applications, and review of environmental impact assessment documents.

In addition, staff continued to actively participate in the Canada Committee on Ecological Land Classification (Wildlife Working Group and Wetlands Working Group) and the Canadian Council on Ecological Areas (CCEA).

Habitat Management will assume responsibility for a Remote Sensing Centre that is being established by the division in the fall of 1987. The centre will be equipped with an ARIES II Image Analysis System and an IBM microcomputer.

Report

ALBERTA FISH AND WILDLIFE DIVISION

Wildlife Act revisions

Alberta's new Wildlife Act and accompanying regulations have been proclaimed and have been in force since 1 April 1987.

Outdoor Observer Program

The Outdoor Observer Program, introduced in October 1985, has experienced exceptional results in apprehending violators when violations are in progress at the time the call is received. Prior to October 1985, officers were successful in apprehending 5-7% of reported violations-in-progress. As of 21 March 1987, officers have been successful in apprehending individuals in 30% of similar calls received on the 1-800 line.

Since October 1985, there have been 3604 calls received: 1191 relating to illegal hunting and fishing activities, 420 to injured and found wildlife, 1673 to non-applicable activities, and 320 wrong numbers.

Of the 924 illegal-activity occurrences concluded, 367 were violations-in-progress and 557 were of a general-information nature. A total of 213 charges and 17 warnings has been issued.

Covert operations

The fiscal year 1986-87 proved to be a year of transition within the Special Unit, as there was a shift of emphasis from extensive covert investigations to short-term covert and increased plainclothes responses to district complaints. Court activities related to two of the major investigations undertaken during the past 3 years, involving domestic fish sales and guiding operations, took up a good deal of officer time; however, they were concluded positively despite losses in some counts.

One covert investigation directed toward commercial fishing operations to determine the reliability of data compared with actual resource pressure was begun and concluded during the year. The outcome, which is most enlightening, will be announced during the summer of 1987. It is unlikely a large number of charges will result; however, the information may prove extremely valuable to fisheries management in the future.

Twenty-one investigations were conducted and concluded during the term. These varied from overt information-gathering to covert plainclothes investigation of less than one-week duration.

It is as yet too early to evaluate the impact that the change in philosophy regarding traffic in wildlife in general, as incorporated in the new Wildlife Act and regulations, will have on the Special Unit's activities during the next fiscal year.

Waterfowl depredation and compensation

Two 5-year, cost-sharing agreements with the federal government were signed (early in 1984) to cover the period of April 1983 through March 1988. One agreement, which allows for payment of compensation to farmers for crop losses, increased the maximum payment for losses from $50/acre (1 acre ≈ 0.4 ha) to $65/acre in 1983, and was amended to $70/acre for 1984, $75/acre for 1985, and $71/acre for 1986. The damage-prevention agreement, which provides for the operation of lure sites (bait stations and lure crops) and scaring assistance to farmers, facilitates both annual and long-term planning.

Game farming

Part of the package of new regulations that became effective 1 April 1987 deals with the keeping of wildlife in captivity, including big-game farming. The commercial sale of meat from captive herds is not accommodated under the new regulations. A final decision on whether to allow big-game ranching (meat sales) will be made by full-caucus vote later in 1987 after public input on the issue has been fully analysed.

Harvest-data collection program

The Wildlife Branch continued the new program for the collection of harvest data, begun in 1985. The program uses a telephone survey to contact a preselected sample of hunters. Harvest data from the 1985 and 1986 hunting seasons were available in time to assist with planning the next year's seasons. Archery and Alberta Fish and Game Association clubs again assisted the program by phoning hunters.

Trapper education

Joint initiatives by the Alberta Fish and Wildlife Division, the Alberta Vocational Centre (Lac La Biche), and the Forest Technology Training School (Hinton) have continued to deliver programming to train trapper educators for both western Canada and the federal government. The programming, developed jointly with the western provinces and territories and the federal department of Indian and Northern Affairs Canada, provides standardized curricula to cover pelt handling and preparation, humane trapping, and furbearer management.

Field-testing of live holding traps for canids

A 2-year field program of testing legsnares and modified leghold traps was completed in 1986-87. The project compared capture efficiency and trap-induced trauma inflicted on coyotes by four devices. This project augments the Fur Institute of Canada (FIC)-Alberta project at Vegreville, which is currently concentrating on killing traps.

Wildlife-resource inventory

A prototype inventory was completed on the population and habitat status of nine wildlife species in the Wapiti (83L) NTS map area, south of Grande Prairie. This study has lain the groundwork for pursuing an operational wildlife-resource inventory program that uses a standard provincial classification system.

Initial work has begun, in consultation with other divisions of Alberta Forestry, Lands and Wildlife, on procedures for a future integrated vegetation inventory that would meet certain minimum requirements from all agencies of the department. The highest priority at present is for a comprehensive and up-to-date vegetation database for the agricultural White Area of the province, where land-use activities are still causing rapid alteration of native vegetation cover.

Endangered-species programs

Management plans and projects are continuing on many of Alberta's endangered, threatened, and vulnerable species. A considerable amount of the work is conducted through the co-operation of several agencies, groups, organizations, and private citizens. Table 1 identifies the species, activities, and co-operating participants.

Wild West Program

The Wild West Program is a prairie conservation program funded by World Wildlife Fund Canada and involves the participation of several government and non-government organizations and landowners. Objectives of the program focus on public awareness, initiating recovery projects, and preparing a Prairie Action Plan to conserve prairie habitats of endangered species.

Alberta Breeding Bird Atlas

Support for the atlas continues to grow. The Recreation, Parks and Wildlife Foundation has granted $42 000 to begin the project this year. The Executive Director (Jack Clements) has been hired, regional co-ordinators are in place, and approximately 300 volunteers are ready to begin the data collection this breeding season. Overall direction for the atlas

Table 1. Endangered-species programs.

Species	Activities	Participants
Peregrine Falcon	National recovery plan	National and provincial agencies and organizations
	Alberta wild population management	Parks Canada, Alberta Environmental Centre
	Urban Peregrines	Cities of Calgary and Edmonton, Alberta Government Telephones
Wood bison	Recovery plan	Canadian Wildlife Service (CWS), Provinces of Alberta, Manitoba, Saskatchewan, British Columbia, and the Northwest Territories
	Habitat improvement	Recreation, Parks and Wildlife Foundation (RPW), CWS
Swift fox	Capture, raise and release	University of Calgary, CWS, World Wildlife Fund (WWF), Calgary Zoo, Western Wildlife Reserve
Burrowing Owls	Population inventory	WWF, RPW, volunteers, Lethbridge Fish and Game
Ferruginous Hawks	Population inventory and habitat enhancement	WWF, RPW, volunteers
Woodland caribou	Provincial restoration and management plan	Alberta Forest Industry
Piping Plover	Population inventory and preparation of management plan	WWF, CWS, Alberta Recreation and Parks
Trumpeter Swans	Population monitoring and Elk Island Park transplant	WWF, CWS, Parks Canada, volunteers

project is provided by a Management Committee composed of representatives from Alberta Fish and Wildlife Division, the Provincial Museum of Alberta, Recreation, Parks and Wildlife Foundation, and the Canadian Wildlife Service.

Non-game Program Plan

A major initiative concerning the development of a Non-game Program Plan for Alberta has begun. There are 366 non-game species in Alberta. Strategies to address species status and management are being considered.

Wildlife '87

Wildlife '87 in Alberta will include both the expansion of existing programs and the encouragement of many new and creative initiatives. Public-awareness programs, sponsorship of habitat projects, and bird-feeder programs, all to promote the value of wildlife, are "gaining momentum." Promotional activities have focused on encouraging individuals, groups, organizations, and industries to volunteer or participate in various wildlife projects. Several ecological reserves are to be created, and the Honourable Don Sparrow, Minister of Forestry, Lands and Wildlife, has established and will continue to establish two natural areas per month during Wildlife '87. A major endangered-species and habitat-conservation program involving World Wildlife Fund Canada will also be announced shortly. This year, the Buck for Wildlife program will spend in excess of $3 million on 190 projects.

Conservation and Hunter Education program

This internationally acclaimed conservation-education program is offered in the junior and senior high school systems and through programs given by 700 volunteer instructors, primarily from the Alberta Fish and Game Association. A comprehensive, highly illustrated 250-page manual, along with a camp experience for 3 days, is offered annually to 10 000 Albertans. Emphasis is placed on wildlife identification and management, firearm safety, first aid, hunter ethics, survival, and knowledge of fish and wildlife regulations.

The Alberta Fish and Game Association recently expanded its role in delivering the program to all Albertans. In addition, workshops by the division's staff ensure that all instructors are certified to specified standards. This program is expanding in 1987 to include a fishing-education course offered through the volunteer instructors.

Mandatory testing for first-time hunters

Commencing in 1987, all first-time hunters will be required to take a test before purchasing an Alberta hunting licence. This test is based on the Conservation and Hunter Education course. People taking the course and successfully passing its test will be eligible to purchase an Alberta licence. The test is available by appointment at all Alberta Fish and Wildlife Division offices and through some Alberta Fish and Game Association offices. A special group of hunter-education instructors has been certified to assist the division.

Bighorn Awards

In 1982, the Alberta Fish and Wildlife Division announced an awards system to recognize and honour individuals, organizations, and associations that have made significant contributions to fish and wildlife conservation in Alberta.

Each year, the public submits nominations, generally through their Member of the Legislative Assembly (MLA), to the Minister of Forestry, Lands and Wildlife. A committee of MLAs recommends recipients of the award, and the recipients are then honoured at a formal banquet in November each year.

The Bighorn Awards program has officially recognized the profile of many Albertans and their efforts in fish and wildlife resource work. Recognition has enhanced public awareness of these people and of fish and wildlife activities.

The Bighorn Award is now considered one of the most prestigious awards in Alberta.

Project WILD

Project WILD is a new environmental education program for schoolchildren. The Alberta Fish and Wildlife Division is working closely with Alberta Education in the elementary school system, and later hopes to expand the program to secondary grades. Individuals from the Alberta Fish and Game Association and naturalist groups are assisting as resource persons and workshop facilitators. Course content involves wildlife identification, management, and the interaction of wildlife with man.

Promotional activities

New displays promoting the land-access program, called Use Respect, and the report-a-poacher program, called Outdoor Observer, were developed. Promotional activities were carried out by divisional staff, with support from the Alberta Fish and Game Association, Alberta Forest Service, Canadian Wildlife Service, the Royal Canadian Mounted Police, and the Alberta Hunter Education Instructors Association.

International wildlife conservation

Alberta has had no international involvement this past year.

Habitat development

During 1986-87, the Buck for Wildlife habitat-development program encompassed 270 fisheries and wildlife projects covering approximately 17 500 ha of prime habitat. Alberta Fish and Game Association clubs were actively involved in more than 70 projects.

There was an increased emphasis on program expansion in 1986-87, and project expenditures were in excess of $3.3 million. It is anticipated that the impact of the program will be expanded provincially in 1987-88, with cost-sharing projects and corporate sponsors.

Habitat retention

Alberta has decided, in the follow-up to the successful pilot project on habitat retention in the County of Red Deer, to embark on a major habitat-retention initiative within the Eastern Irrigation District and the counties of Red Deer and Minburn. These areas are situated in southern, central, and northeastern Alberta, and are primarily waterfowl, pheasant, and white-tailed deer habitats.

It is envisioned that, after 3 years and $1.5 million, a significant quantity of the habitat required to achieve the resource goals established for these areas will be realized. An ongoing evaluation of the program's approach in meeting expectations is built into its delivery, and provision has been made for retrofitting to accommodate changes without sacrificing earlier participants.

The program remains voluntary and provides an economic alternative for landowners wishing to maintain a specific pattern of land use amenable to wildlife interests.

Antelope Creek Habitat Development Area

In January 1986, Ward Ranch, a 2224-ha tract of land adjacent to San Francisco Lake, 9 miles west of Brooks, Alberta, was jointly purchased by Alberta, Wildlife Habitat Canada, Ducks Unlimited, and the Alberta Fish and Game Association for $1.95 million. The parties jointly agreed to manage and develop the property for wildlife and agriculture with revenues received from other users on the lands, e.g., oil and gas developments and agriculture.

An official opening ceremony was held on 4 October 1986, and the property was renamed the Antelope Creek Habitat Development Area. Management plans call for the development of 284 ha of new wetland habitat involving about 30 basins. Another 57 ha of pheasant and deer habitat associated with water canals and wetlands will also be developed.

It is estimated that the land could provide about 10 000 recreational hunting days per year. Ancillary uses, including bird-watching and photography, will also be accommodated, as the lands are strategically located in one of the prime waterfowl-wetland production areas of this continent.

Wetlands for Tomorrow

Of the 20 key wetlands identified in the 1982 Wetlands for Tomorrow agreement with Ducks Unlimited, one has been completed to date. The Tyrrell-Rush Lakes project was officially opened on 4 October 1986. Projects currently in the final-design stages include Stirling Lake, Whitford/Rush, Manawan Lakes, Vauxhall Marsh, and Beaverhill Lake. All of these projects are scheduled for construction during 1988.

Committee-structure and project-approval processes have been agreed to by Alberta Agriculture, Alberta Environment, Alberta Forestry (Public Lands and Wildlife Divisions), and Ducks Unlimited (Canada). This agreement has been fundamental in the implementation of all aspects of the wetland program.

Report

MANITOBA WILDLIFE BRANCH

Operational management programs

Subsistence hunting

Barren-ground caribou management plan The Beverly-Kaminuriak Caribou Management Board approved a joint caribou-management plan and reviewed it at a special user assembly in Eskimo Point in August 1986. The plan was amended based on user and public comments and is now in final preparation, scheduled to be released and discussed in Manitoba user communities in the early fall of 1987.

Skownan Moose Management Board The Skownan Moose Management Board is in place and functioning well. At present, the board, at the request of native people, is exploring new initiatives in an attempt to curtail hunting by a select few Treaty Indians who are going against the wishes of their peers. Hunting activity by Treaty Indians in this area is down substantially, and the moose population is at a level at which it has the potential to expand rapidly if left alone.

Game Hunting Area 8 Moose Management Agreement In November 1986, the Game Hunting Area (GHA) 8 Moose Management Agreement was renewed for an additional 3 years. This agreement involves the following groups: The Pas Indian Band; Moose Lake Indian Band; Easterville Indian Band; The Pas Area Wildlife Association; Cormorant Community Council; Moose Lake Community Council; and the Manitoba Department of Natural Resources. An important element of the agreement is that all groups have agreed that there will be no hunting in the area for 3 years.

West Region Elk Management Board A co-operative elk-management board was established to look at all issues relating to elk management in the Duck Mountains. It consists of a department person and representatives from local Indian bands, Métis Federation, Chamber of Commerce, local municipalities, and those that are for and against elk ranching. The success of this board lies in the value of the various interest groups meeting together to analyse problems and determine future courses of action.

George Barker Wildlife Refuge A series of wildlife refuges was established which extends 300 m from each side of the road in several key areas. One of these, the George Barker Wildlife Refuge, was dedicated in 1986 to the memory of Chief George Barker, a well-respected conservationist and former chief of the Hollow Water Band. A monument was erected with assistance from many individuals from within and outside the department. Approximately 100 people attended the ceremony, including some schoolchildren from the Band, the Barker family, and friends of George Barker from the Hollow Water Band and other bands in the area.

Five-year Report to the Legislature

Manitoba's second Five-year Report to the Legislature is nearing completion. The report will contain a review of wildlife-management programs, an analysis of trends in, and a forecast of demands for, the use of wildlife resources in the province, and an evaluation of the capability of the wildlife resources to meet anticipated demands. The report will be available for tabling in the legislature by September 1987.

Amphibian and reptile harvesting

During a two-week snake-picking season, 54 342 red-sided garter snakes were captured live and sold to biological supply houses in the United States and Britain. A two-month leopard frog season resulted in the sale of 16 192 kg of leopard frogs.

Researchers in the snake-den area have been actively studying the biology of the red-sided garter snake and long-term effects of harvesting on the populations.

Wildlife education

In early April, National Wildlife Week continued to draw public attention to the value of wildlife. Based on the 1986 theme, "Help Wildlife in Jeopardy," Manitoba's Ten-agency Working Group organized a poster and prose contest for students in grades 3 to 8. The contest attracted 1200 entries. The working group also produced a doodle poster and Peregrine Falcon colouring page, and distributed educational booklets to Manitoba teachers. Pacific Western Airlines sponsored the 1986 contest and provided the 10 winners with free round-trip passes to Churchill. Wildlife displays involving some 20 advocate wildlife groups were set up in Brandon, Portage la Prairie, and Winnipeg, reaching an estimated 150 000 people. The plight of Canada's endangered wildlife was covered in a variety of ways by media outlets. In 1986, the Canadian Wildlife Federation presented the prestigious Doug Clark Memorial Award to Manitoba's Ten-agency Working Group for its accomplishments in the field of conservation education. This was the first time the award recognized such a group.

The Manitoba Wildlife Branch formally introduced Project WILD to Manitoba's school system in April 1986. Sponsored by the Canadian Wildlife Federation, Project WILD is delivered by participating members (four provincial wildlife branches as of April 1986) for the purpose of bringing a wildlife and conservation message to educators and their students. An interdisciplinary program, it is aimed at schoolteachers from kindergarten to grade 12. It can also be used by leaders of youth groups involved in environmental education programs (4-H, Girl Guides, etc.). Project WILD manuals are distributed to educators who, as volunteers, complete a workshop conducted and co-ordinated by Wildlife Branch staff. In the first year of operation of Project WILD, Wildlife Branch staff conducted four workshops and ran 10 orientation presentations. Project WILD originated in the western United States in 1981 through a joint effort of the Western Regional Environmental Education Council and the Western Association of Fish and Wildlife Agencies.

Throughout 1986, Wildlife and Public Information staff produced a series of 30-min television (TV) programs on Manitoba's natural resources. Hosted by students in gifted and talented classes in grades 5 and 6, "Video Kids Magazine" is aired on community cable TV. Programs focused on snakes, owls, wildlife in the city, white-tailed deer, and snow. Others have been produced on Manitoba's bird life, the provincial science fair, and the art of decoy carving.

Big-game investigations

The collection of large numbers of big-game jaws for ageing purposes has been a problem for wildlife managers. Manitoba has solicited support from corporate donors who have donated significant and valuable prizes as an incentive to submit samples. In 1986, jaws from about 80% of the licenced harvest were submitted. This is a significant increase from the 40% or so submitted previously.

Cadmium has become a focal issue in Manitoba, and the department has received $42 000 from the World Wildlife Fund to look at the prevalence of this toxic metal in moose, elk, deer, wolves, bears, and coyotes.

In order to have hunters submit reproductive tracts from harvested female moose and elk, an attractive belt buckle was designed and given to each hunter submitting material. Almost 130 samples were submitted, providing the department with some extremely useful and up-to-date information regarding reproduction in moose and elk.

Hunting programs

Recreational hunting remained popular in 1986-87. Big-game hunters harvested 1750 moose, 21 200 deer, 750 elk, 900 black bears, 40 woodland caribou, and 20 timber wolves. In 1986, 32 577 resident and 6062 non-resident game-bird hunters took to fields and marshes. Goose-hunting remained excellent. In the Oak Hammock Marsh Managed Hunting Area alone, 3000 hunters shot 14 000 geese (10 000 Canada Geese and 4000 Snow Geese and Blue Geese), an all-time high.

Upland game-bird populations are increasing, and hunters enjoyed more successful hunts.

For the first time, licences for the Wild Turkey hunt were issued on an unlimited basis, rather than by a lottery. Three hundred and fifty hunters participated.

Three term regulations have been established for future turkey seasons, and term regulations are being considered for other species. This move should enhance program efficiency and reduce public uncertainty.

Winnipeg deer herd relocation program

The Winnipeg deer herd is valued by many city residents. Unfortunately, habitat loss coupled with damage caused by deer to residential vegetation, deer-auto collisions, and hazardous airport situations crystallized the need to reduce the size of the rapidly growing herd. With the help of the St. Malo Wildlife Association, 264 deer were live-trapped and relocated to southeastern Manitoba in 1985 and 1986. The long-term goal is to stabilize the city herd at 300 animals, down from its current level of approximately 500.

Habitat-management programs

Wildlife Management Areas

The year 1986 marked the 25th anniversary of Manitoba's Wildlife Management Area (WMA) Program. Activities commemorating this milestone included the placing of a cairn at Watson P. Davidson WMA, Manitoba's first Wildlife Management Area, the distribution of 25th-anniversary posters and iron-on decals, the development of a WMA field guide, and production of a panel display layout.

During 1986, 89 246 ha of crown lands were proposed for establishment as WMAs. A Manitoba first was achieved with the signing of a joint forestry-wildlife memorandum-of-agreement outlining plans to develop, maintain, and enhance the 79 000-ha Moose Creek Provincial Forest/Wildlife Management Area. Approximately $190 000 in grants-in-lieu-of-taxes were paid by the province on 45 southern WMAs in 49 rural municipalities and local government districts.

Development activities carried out on WMAs during 1986 included boundary delineation, sign placement, and access construction. Projects for the enhancement of wildlife habitat involved planting forage plots, nesting cover, and shelterbelts, improving water supplies, and modifying successional stages of aspen. Numerous information and extension activities were undertaken, including interpretive programs at Narcisse WMA and Oak Hammock Marsh WMA, and interpretive signs were erected at Grant's WMA.

Deer habitat

The focus of the 1986 Deer Habitat Program was the acquisition of 130 ha of critical white-tailed deer habitat in southwest Manitoba. These lands consist of 65 ha of rolling aspen-oak woodland and native grasslands that will expand the Edrans Unit of the Whitemud Watershed WMA, as well as 65 ha of woodland-slough complex that will be added to the Tiger Hills WMA.

Activities for the enhancement of deer habitat included the development of forage plots at St. Malo WMA, Little Birch WMA, and Birds Hill Provincial Park, improvement of water supplies in the Mars Hill area, and maintenance of aspen regeneration plots on the east side of the Duck

Mountains. A fireguard was cleared around 600 ha of mature wooded cover at Narcisse WMA to facilitate a prescribed burn.

Wetland management

Wetland habitat projects continued on several fronts. The Oak-Plum Lakes Resource Management Task Force initiated work on a development plan for the Oak-Plum Lakes basin. The major effort last year was an intensive contour survey of the area, which is required to develop concept plans. Liaison was maintained with local interest groups to keep them up to date. A Resource Management Task Force in place for the Rat River Wildlife Management Area development continued to gather hydrological, soils, and biophysical information for use in preparing concept plans for this valuable wetland in southeastern Manitoba. It is anticipated that a final proposal will be available by spring of 1988.

At the Delta Marsh, Wildlife Branch staff facilitated ongoing discussions with local landowners and Water Resources Engineers in an attempt to reach mutually acceptable water-management strategies that might lead to eventual wildlife-enhancement works in the School Bay Unit of the Delta Marsh.

The Heritage Marsh Advisory Committee was active last year, and Wildlife Habitat Canada became a signatory to the Manitoba Heritage Marsh Agreement on 20 February 1987. The committee requested crown land plans for several candidate heritage marshes, including Whitewater Lake, Oak-Plum Lakes, and Dennis Lake.

Ducks Unlimited maintained an active program in Manitoba. The Vestfold Marsh Project in Manitoba's Interlake was initiated, and six segments of the Portia Wetland Complex in the Westlake were also completed. Another highlight was continued progress in the Carrot River Triangle Project (in the Saskeram Wildlife Management Area) near The Pas.

Habitat inventory

An inventory of deer habitat in Agro-Manitoba was continued in 1986-87. The project was implemented to determine rates of loss of tree and shrub cover in various areas of Manitoba. Sixteen study sites of four townships (374 km^2) each have been selected and will be inventoried every 5 years using Landsat satellite data to monitor changes and identify long-term trends. Seven sites have been analysed using 1981 and 1986 data. Average losses range from 5 to 7%.

A co-operative project has been undertaken with the Manitoba Remote Sensing Centre to assess the new Landsat Thematic Mapper Satellite data for its potential application to the monitoring of waterfowl habitat, including wetlands and upland cover types such as grass, forage, and shrubbery. This new database has higher resolution than previous Landsat information, as well as additional spectral information. This new product will provide the detailed information required to guide mitigative waterfowl habitat programs. The rural municipalities of Strathcona and Shoal Lake will be cover-mapped through computer interpretation of the Thematic Mapper data and analysed for accuracy. A report on the findings will be published by 1 September 1987.

A general habitat cover map was produced for the 1.85-million-hectare Cape Churchill WMA at a scale of 1:250 000. This is the first habitat map of the region, and was produced through visual interpretation of Landsat satellite paper prints and cartographic reproduction.

Habitat Heritage

Governed by the Manitoba Habitat Heritage Act, this program is administered by the Board of Directors of the Manitoba Habitat Heritage Corporation. The objects of the program are the conservation, restoration, and enhancement of Manitoba fish and wildlife habitat.

Funded by a grant of $250 000, the corporation in 1986 purchased 260 ha of valuable deer habitat in southwestern Manitoba and signed habitat protection agreements on 630 ha with 11 landowners.

Seventeen habitat-enhancement projects were funded by the program in 1986, including the establishment of several tame forage plots and forest-regenerating (food) plots in the Duck Mountains, prescribed burns to enhance moose and elk habitats, and a Sharp-tailed Grouse habitat-restoration project.

Habitat Heritage also funded four projects that provided nesting structures for Ferruginous Hawks, Great Gray Owls, and Burrowing Owls.

Habitat Canada projects

Duck Mountain burn A 5-year project, funded by Wildlife Habitat Canada, the province, and the Manitoba Habitat Heritage Corporation, will begin during the summer of 1987. The project involves the use of prescribed burns to re-establish grasslands in a 52-km^2 area in the Duck Mountain Provincial Park and Forest. These controlled burns will provide, among other wildlife benefits, improved winter habitats for elk, thereby reducing the likelihood of damage by the elk to agricultural crops in the peripheral areas of the Duck Mountains.

Habitat Enhancement Land-use Program (HELP) Work on HELP, a multiple land-use program in the prairie pothole district, continued in 1986-87. Evaluation and monitoring aspects of HELP were developed, a simplified lease agreement was drawn up, and a master agreement covering all aspects of the program was negotiated with Wildlife Habitat Canada and Ducks Unlimited. Treasury Board approved $280 000 and three staff-years for HELP in January 1987. Final signing of the agreement is expected in June, and the program is to be operational in early autumn.

North American Waterfowl Management Plan (Prairie Joint Venture)

On 20 May 1987, the Manitoba Waterfowl Technical Committee submitted the "Manitoba Implementation Plan of the North American Waterfowl Management Plan (NAWMP)" to the Manitoba Steering Committee. This plan was submitted in accordance with guidelines set by the Prairie Joint Venture.

The implementation plan targeted direct and indirect programs for Agro-Manitoba (prairie pothole habitat). The proposed direct programs include nest baskets, fenced and unfenced dense nesting cover, demonstrations of conservation farming techniques, and incentive payments to landowners to establish cover. Indirect programs cover modifications to the crop quota system, municipal taxes, herbicide costs, and water-management practices.

Manitoba's objectives are to produce and maintain an average May breeding Mallard population of 400 000 (equivalent to 186 000 pairs); to produce and maintain an average breeding population of 2.0 million ducks; and to promote waterfowl-compatible farming techniques that also contribute to soil and water conservation.

The programs would be implemented on a land base of just over 1.2 million hectares, of which 86% is improved. In total, 146 townships (13 600 km^2) were selected for habitat initiatives. Of this total, 130 townships are in Strata 39 and 40, and the remaining townships (16) are located in Stratum 37.

Commercial management programs

Wild-fur management

Manitoba trappers harvested $5.1 million worth of wild fur, up $300 000 from 1985. Indications are that the current harvest will exceed $6.0 million. Trapping-licence sales decreased to 15 000 from 16 000.

Trapper-education staff conducted 17 fur schools involving 600 trappers and, with the Manitoba Registered Trappers Association, delivered the fur-conservation message to 20 000 students in their classrooms. Trapline Officers completed upgrading in fur conservation, humane trapping, and instructional techniques.

The Fur Program, cost-shared with the federal department of Indian and Northern Affairs Canada, continued to provide financial and manpower resources to the Fur Institute of Canada, and assisted the Manitoba Registered Trappers Association with $60 900 in grants.

Wildlife-damage control

The department helped prevent black bear damage to beehives by removing problem bears from the vicinity of bee yards. As a result of these efforts, bear-damage compensation payments dropped to $11 600 from $14 300 paid out in 1985-86. In addition, 40 grants of $100 each were made available to beekeepers who installed bear-proof electric fences around bee yards. Scaring devices and repellents were used to protect crops from elk and deer damage. Winter intercept feeding was again used as an alternative feed source to reduce deer and elk damage to crops or stored feed. Compensation payments for deer, elk, and black bear damage to farm crops amounted to $232 500.

Because of an extremely wet fall and long harvest period, crop damage by waterfowl (mainly geese) was severe. Program costs of $450 000 were shared equally between Manitoba and Canada.

The Federal-Provincial Riding Mountain National Park Beaver Damage Control Program was undertaken again this year in accordance with the 5-year agreement.

Wood bison program

The wood bison at Waterhen bred successfully in 1985-86, and 11 calves were produced on the site. With further additions from Banff and Metro Toronto zoos, the population has now reached 102.

In winter, the population was rounded up, and young animals (all born at Waterhen, 19 total) were segregated for potential release to the wild in the spring of 1988.

A significant observation at Waterhen has been that animals from zoological parks and gardens require at least 1 year to make a complete adjustment to their new environment.

Elk ranching

A policy decision in 1986 by the Manitoba Cabinet has brought to an end the concept of commercially raising elk for sale of meat or parts in Manitoba. Negotiations are ongoing with the existing "experimental" ranch as to how and when it will wind down its operation.

Biological-services programs

Non-game

Raptor projects For the fifth consecutive year, funds provided by the US Fish and Wildlife Service made it possible to conduct an aerial search for Bald Eagle nests. In 1986, the Gods Lake area of north-central and eastern Manitoba was surveyed, and 138 active nests were found. It is now estimated that more than 1500 pairs of Bald Eagles nest in the province. In return for funding the aerial surveys, Manitoba allowed US officials to take 10 nestling eagles from 10 different nests (each containing two or more young) for release in New Jersey. Annual releases of Manitoba eaglets, which began in 1984, are helping to rebuild the eastern US Bald Eagle population.

Burrowing Owls were fairly common in southwestern Manitoba from 1930 to 1960, but populations have plummeted since 1960. Surveys made from 1982 to 1984 revealed a continuing decline, from 76 breeding pairs in 1982 to 35 pairs in 1984. In 1986, 30 pairs were found, but their reproductive success was poor. Suitable but unoccupied habitat found in 1986 suggests that factors other than habitat loss are contributing to current declines. A combination of habitat loss, road kills, bad weather, and pesticide poisoning apparently have contributed to recent declines.

Low vole populations inhibited Great Gray Owl nesting in southwestern Manitoba. Close to 150 nest structures were checked one to three times, but only three active nests were found. Radio-tracking and visual observation of nine birds from these nests provided detailed information on habitat use, foraging behaviour, and inter-family relationships.

An international symposium on biology and conservation of northern forest owls of the world was held in Winnipeg in February 1987.

Under Parks Canada funding, four young Peregrine Falcons from the Canadian Wildlife Service facility at Wainwright, Alberta, were successfully released from the roof of the Grain Exchange Building in downtown Winnipeg. The total number released to date is 25. The first evidence of survival and return to the release site was obtained in 1986, when a pair of adults set up territory in downtown Winnipeg. No egg was produced. The pair consisted of a male released at the University of Manitoba campus in 1984 and a female released in Montreal in 1983. Unfortunately, the male later died following a collision with some object.

Colonial waterbirds An intensive search uncovered many new nesting colonies of American White Pelicans. Colonies have been found on 45 islands in the three largest lakes in southern Manitoba, i.e., Lake Manitoba, Lake Winnipeg, and Lake Winnipegosis. Pelican estimates obtained during aerial surveys were checked by counting birds on photographs taken during the flights. Estimates were low by about 30-70%. It is now known that approximately 30 000 pelicans nest here. This is more than twice a 1978 estimate for all of Canada, and almost half the current Canadian population. Accurate population data are needed to manage this species.

Information on several colonial species in addition to pelicans was obtained during pelican surveys, in particular Double-crested Cormorants, California Gulls and Ring-billed Gulls, Caspian Terns and Common Terns, and Great Blue Herons. Apparent increases in cormorants are causing concern to commercial fishermen. This factor, plus concerns about habitat changes due to stabilization of water levels, development of woody vegetation, and changes in species composition, make it imperative to have accurate information on populations and trends. Because of concerns about effects of pesticides, eggs of most species were collected for pesticide residue analysis.

The status of the Piping Plover in Manitoba appears to be precarious, as is the case throughout most of its North American range. A 1985 report notes only 120 breeding birds in the province, only 20% occupancy of former sites, and declining reproductive success in remaining populations.

During aerial surveys of colonial waterbirds on Lake Manitoba, Lake Winnipegosis, and Lake Winnipeg, more than 100 potential Piping Plover nesting areas were noted. Some apparently suitable sites, when checked on foot, were found to have no plovers. Long Point (Lake Winnipeg) turned out to be a major nesting area, extending the range of the plover in the province by about 130 km. A more intensive search is planned for 1987.

Population ecology

Canada Geese The long-term study of the Eastern Prairie Population (EPP) of Canada Geese at Cape Churchill continued in 1986. Breeding populations increased approximately 12% over 1985; nesting success was also higher. Bands were placed on 2600 birds on the breeding grounds. Neck collars were placed on 1750 of these banded birds. The maintenance of a large number of banded birds in this population is the basis for estimates of survival and migration patterns.

A co-operative study with the University of Wisconsin of lead levels in the blood of EPP Canada Geese was begun. Two thousand blood samples were taken at Churchill; 300 blood samples and 800 gizzards were collected at Oak Hammock during fall migration.

One hundred and sixty-five giant Canada Geese were banded at the Riverton Marshes and Lake Manitoba Narrows. Over 2000 ducks were banded at Dauphin Lake.

Harvest estimates for the Oak Hammock Managed Hunting Area were collected as part of the ongoing intensive management of hunting in this important area. The estimated harvest of Canada Geese at Oak Hammock was 13 000, the highest harvest on record. This is the third year in a row that a record-high harvest has occurred. The implications of increasing harvest are being carefully reviewed.

Sharp-tailed Grouse To enhance the recovery of Sharp-tailed Grouse populations in the central Interlake area, portions of the Narcisse Wildlife Management Area were cleared in early 1987 to create new dancing grounds and remove excessive shrubby vegetation from old dancing grounds. The benefits generated by this habitat manipulation will be measured by a graduate student from the University of Manitoba, as part of his graduate program.

Big game Fieldwork in the Saskatchewan River Delta continued for the third winter, documenting the response of a wolf population to a very low abundance of prey (moose). The trend during this study has been for the wolf population to aggregate into packs less than is usual. Only one pack (of 10 wolves) was found in 1986-87 out of a total population of 20-25 wolves.

In 1984-85, there were six packs in the area, with small, more clearly defined home ranges. Very few moose kills were found, and there was virtually no use of alternative prey.

The development of a computer simulation of the processes being documented in the Saskatchewan River Delta is continuing, with an emphasis on the implications of low prey availability on pack integrity and foraging patterns. The results of this simulation work are expected to be extremely useful in developing management plans to deal with the complexity of wolf-ungulate systems.

In the boreal-forest region east of Lake Winnipeg, the Wildlife Branch is conducting a series of co-operative studies of woodland caribou with the Parks Branch, the Forestry Branch, Abitibi-Price, Inc., and the University of Manitoba. The objective is to create timber-harvesting guidelines during the next 5 years that are specific to this area and that will minimize impact on the caribou herd. Long-term strategy is to blend these guidelines with the use of ongoing caribou monitoring to determine the best location for cuts. This winter, approximately 25 radio-collared caribou were tracked to record movement patterns. During the tracking of these animals from the air, areas of intense feeding activity were recorded. These areas were visited by snowmobile, and feeding effort and pattern were noted in detail.

A study was conducted of the biases that can exist in our system of estimating harvests of big game through analysis of hunter questionnaires. Data are still being collected, but indications are that extremely useful corrections for non-response errors will be generated.

A 3-year co-operative study of the movements of black bears in the Riding Mountain area was agreed to by Environment Canada - Parks Canada and the Manitoba Department of Natural Resources. The objective is to achieve optimum, co-operative management of black bears.

Biological analysis

Biological analysis of wildlife specimens Specimens moving through the bioanalysis process consist of two main types: scheduled collections, and incidentals collected by staff or donated by the public. During 1986-87, almost 1000 big-game (moose, elk) jaw specimens were collected and age determinations made to assist in designing management programs. Of the 915 furbearer carcasses processed, 176 were lynx and the majority of the remainder were mustelids. Data show an unsatisfactory status for fisher in some areas and a low percentage of kittens in the lynx population, which will result in continued restriction on harvest of these furbearers.

Increasing numbers of other specimens were given to museums, universities, and other agencies for collection or disease determination. The only major health problem indicated was a high incidence of sarcoptic mange in foxes in the western and southwestern regions, and in wolves in The Pas area.

Fur-harvest statistics Entering its third year of operation, the fur-harvest computer system is continuing to improve. Statistics generated on over 15 000 trappers and the capture location of 200 000 - 300 000 furbearers harvested during the year allow for continued refinement of fur-management systems.

Improved trapping systems Co-operative work with trap inventors and the Fur Institute of Canada continued during 1986-87, primarily in the area of powersnare development. A questionnaire program was implemented to provide current trap ownership and usage, along with general trapper profile data. Assessment of trap trauma indicated a need for intensifying trapper-education programs in the area of humane trapping.

Special projects

COSEWIC Section staff actively participated in the preparation and review of Committee on the Status of Endangered Wildlife in Canada (COSEWIC) reports. The Section Chief chaired the Mammal Sub-committee of COSEWIC and prepared draft principles and guidelines for listing and down-listing COSEWIC species. Non-game staff reviewed four bird status reports and completed editing of the American White Pelican report.

CITES During 1986, the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES) Management Authority in Manitoba issued 150 export permits for polar bears, timber wolves, and several furbearer species. A CITES status report on the lynx was prepared by section staff. The Section Chief will be one of two provincial/territorial representatives on the Canadian delegation to the 1987 international CITES Conference in Ottawa on 12-24 July 1987.

Report

ONTARIO MINISTRY OF NATURAL RESOURCES

Wildlife research

In 1986, a wild population of foxes in Ontario was successfully vaccinated against rabies for the first time. Work is progressing in this area to improve the percentage of animals vaccinated.

We are continuing to track polar bears that were radio-tagged in 1986. The area of Hudson Bay and adjacent land and water covered in this operation is as large as the Province of Ontario.

Analysis of a long-term set of deer data is beginning to show dividends. One early conclusion reached was that a measurement of hunter effort has better correlation with deer population than pellet-group count.

Interrelationship of winter and summer habitat, non-hunting mortality estimates, and effects of supplementary feeding are some of the items being studied in a co-operative program with a number of Ontario universities. More of the results of the Co-operative Deer Study will be available in the near future.

Hunter Education Program

Ontario's Hunter Education Program, which was established in 1957, has trained over 700 000 prospective hunters. Each year 26 000 new hunters are trained by 1165 active instructors.

Effective 1 January 1987, all applicants for a hunting licence examination are required to complete the training course before applying for their examination. A new Hunter Education Instructor's manual has been developed and is currently being introduced throughout the province. This new instructor's manual complements the Hunter's Guide, which was introduced in 1985.

Wild furbearer management and conservation in North America

In recent years, the harvesting of furbearers has been severely criticized by anti-trapping and animal-rights organizations in Europe and North America. One of the best ways of answering these criticisms is to demonstrate that the biology of furbearers is generally well understood, that furbearer populations are responsibly managed to ensure a sustained yield, and that furbearers are trapped humanely.

A joint project of the Ontario Ministry of Natural Resources (OMNR) and the Ontario Trappers Association is intended to document our present state of knowledge of furbearers. In the fall of 1984, a team of biologists, editors, illustrators, and technicians under the direction of Milan Novak, Fur Management Supervisor, OMNR, began to assemble a book ("Wild Furbearer Management and Conservation in North America") that would serve as an important reference source for trappers, hunters, those involved in the fur industry, students in a technical or university-level biology program, wildlife managers, naturalists, and the interested public.

Approximately 1000 pages long and containing numerous black-and-white and colour illustrations, the book is a comprehensive examination of furbearer management and the major issues facing the fur industry. Articles range from the prehistoric use of furbearers by aboriginal peoples to the latest information on the scientific basis of furbearer management.

To ensure that the material presented is sound and up to date, prominent authorities from all over North America were recruited as authors. To ensure the highest degree of accuracy in the content, manuscripts were subjected to a rigorous scientific and editorial review, both "in house" and by external reviewers. Over 300 reviewers donated their time and expertise to the project to help maintain the high standards of the book and to ensure that the credibility of the content will be above question. The book is nearing completion and will be available in the fall of 1987.

Project WILD and other wildlife educational programs

In the fiscal year 1986-87, the Wildlife Branch held two Project WILD Leadership Workshops that trained about 100 people (OMNR Fish and Wildlife staff and school-board staff such as curriculum consultants, principals, and teachers) as Project WILD leaders--to deliver the WILD program to elementary-school teachers in 6-hour-long training workshops. These leaders, along with about 70 previously trained leaders, ran 101 teacher-training workshops across the province in 1986-87 to train a total of 3255 teachers. Project WILD is a highly successful program in Ontario, and we are making great strides with teachers as a new client group. Other wildlife educational programs include a 4-H Wildlife Management Project and our National Wildlife Week efforts, through which our staff directly contact more than 25 000 schoolchildren in grades 4 to 6.

Community Wildlife Involvement Program (CWIP)

CWIP has grown steadily since its inception in June 1985. During the 1986-87 fiscal year, more than 140 CWIP projects were completed or were begun (an increase of 67% over last year). Altogether, almost 8500 people participated in projects, donating over 65 000 h of their time (an increase of 70 and 117%, respectively, regarding number of participants and participant-hours).

Projects are increasing in size and complexity as members of the public develop exciting ideas to enhance wildlife and public understanding of Ontario's wildlife resource.

Moose program

The moose population is continuing to increase in many areas of the province, largely because of the success of the Selective Harvest Program. The estimated moose population is now over 100 000 animals.

A system by which opportunities to hunt adult moose are allocated, within the context of the Selective Harvest Program, is being reviewed. A system by which adult-moose validation tags are allocated within the tourist industry is also being reviewed.

In the winter of 1986-87, Ontario once again made adult moose available to help Michigan in its admirable effort to re-establish moose in northern Michigan. Twenty-nine adult moose were successfully translocated from central Ontario.

Black bear program

The implementation of the new Black Bear Management Policy and Program was approved in the late fall of 1986. The new program will set direction for a sound management of Ontario's black bear population. Some components of the new program were implemented by amending existing regulations under the Game and Fish Act. These amendments were approved on 23 January 1987, and the new regulations are being introduced for the spring of 1987.

The new regulations in effect for the spring season are as follows:

(1) The use of dogs by resident and non-resident hunters hunting black bears will be allowed only from 15 April to 15 May. In a smaller area, residents using dogs may continue to hunt from 15 May to 15 June. Use of dogs for hunting in the fall season by residents and non-residents is still permissible.

(2) Non-residents of Ontario hunting black bear must be accommodated by or using the services of the tourist industry. Authorized operators can include tourist establishments, commercial guides, and air carriers who have provided accommodation and/or services to bear hunters in 1 of the last 3 years. Non-resident black bear hunters must obtain a Black Bear Hunting Licence Validation Certificate from an operator to validate a hunting licence to hunt bear.

(3) Hunters are prohibited in the spring from shooting cubs born in the year of the hunt and females accompanied by cubs.

(4) Shooting is prohibited within 400 m of a waste-disposal site on crown land.

(5) Shooting of bears in their dens is prohibited.

Other components of the new program need amendments to the Game and Fish Act before their implementation. It is expected that amendments will be made in the fall of 1987.

Deer management

The positive impact of selective harvest programs has allowed Ontario's deer population to more than double within the last 7 years to an estimated herd of over 200 000.

The relatively mild winters in recent years have allowed more deer to get through the winters in better condition than would have otherwise been possible. The result is a healthier and larger deer population.

In 1986, over 112 000 deer hunters enjoyed 675 000 days of recreational hunting and harvested nearly 27 000 deer.

The provincial plan is to hold deer densities at levels just below the carrying capacity of the range and thereby sustain the healthy condition of the animals and avoid dramatic changes in deer numbers usually associated with overpopulation.

Co-operative waterfowl management

The OMNR manages waterfowl on a co-operative basis with the Canadian Wildlife Service (CWS) and various US states. Ontario is a member of both the Atlantic and Mississippi Waterfowl Council (flyway) and works closely with our US neighbours. An example of successful international efforts was the record number of over 7000 ducks banded in Ontario in 1986. The banding was done with the help of flyway funds and will provide essential biological information for waterfowl managers.

Wild Turkey reintroduction program

This co-operative program between OMNR, the Ontario Federation of Anglers and Hunters, and other conservationists was initiated in 1984. Wild Turkeys from the United States have now been stocked and appear to be thriving in six OMNR districts. The program has been so successful that the first controlled spring hunt for gobblers or male Wild Turkeys (bearded birds) occurred in Napanee District in May 1987. A part of Ontario's natural heritage has been returned in the form of this magnificent bird.

Management of southern wetlands

Agricultural southern Ontario has lost about 75% of the wetlands it once had, and conservation of remaining wetlands has become a major concern. In 1984, the province issued planning guidelines that gave all municipal and other planning authorities notice that the province was concerned about wetlands, and requested that planners have regard for the natural values of wetlands.

A wetland-evaluation system previously developed with Environment Canada was applied to provide information to planners on wetland values and relative importance. By the end of the present year, all wetlands of provincial and regional significance will have been evaluated.

Early this year, the Premier announced a 100% property-tax rebate for owners of significant wetlands. Later this year, we hope to strengthen the province's expression of concern and direction of the planning process by changing the guidelines into a planning policy.

Funding of various securing mechanisms, such as acquisition or management agreements, is being supplied via agreements with Wildlife Habitat Canada and Ducks Unlimited (Canada). A separate agreement is being planned with Ontario's Natural Heritage League, which encompasses the many non-governmental organizations interested in this program.

Acidic precipitation studies--Contaminant biomonitoring in game animals

The moose is a game species that feeds extensively in aquatic habitat during summer months. Swedish studies in 1981 reported high concentrations of cadmium in moose liver and kidney that, in some instances, exceeded World Health Organization (WHO) standards. Preliminary work carried out by OMNR in 1984 in one area north of Huntsville showed a broad range of cadmium concentrations in moose kidneys, ranging from trace levels to levels higher than those acceptable to the WHO.

Geographic regions characterized by poorly buffered soil may have higher levels of cadmium available for uptake by wildlife because of accelerated leaching due to increased acidic precipitation. Most of the moose population and a portion of the deer population in Ontario inhabit areas of such geophysical sensitivity. The Wildlife Branch program will:

- examine the levels of cadmium in the kidney, liver, and muscle of moose and white-tailed deer;
- investigate regional and age-class differences in cadmium content of moose and deer; and
- provide data for decision-makers on implications for human health.

Tissue samples from 256 moose and 252 deer were collected in 1985 for analysis in 1986. Analyses showed that the highest mean levels of cadmium in kidney in Ontario were found in animals from the non-buffered areas of Algonquin Park and the adjacent Loring site. However, it was noted that cadmium in moose kidney was also high in a geochemically buffered site (St. Joseph's Island) that receives high annual wet deposition of cadmium. In all regions, the level of cadmium was highest in kidney, lower in liver, and often undetectable in muscle. Cadmium levels increased with animal age. The sampling base for both deer and moose was increased in 1986, and tissue specimens from 1145 deer and 719 moose were collected for metal analyses.

Levels of cadmium in moose in parts of Ontario are comparable to or higher than those found in Quebec, and are considerably higher than those found in Manitoba, Maine, and Scandinavia. The cadmium level in the kidney and liver of white-tailed deer in Ontario was considerably higher than levels found in Quebec, but lower than those in Pennsylvania.

Outside investigators from Laurentian University and the University of Western Ontario are working with OMNR to investigate the pathways of cadmium uptake in deer forage and cadmium buildup in selected moose tissues.

Additional studies are ongoing with Trent University to investigate cadmium burden in waterfowl, and with McMaster University to examine amphibian mortality in acidic metal-contaminated ponds.

In 1987, we are collecting tissue samples from black bears to further our knowledge on levels of cadmium in wildlife species.

Non-game program

In 1986, a total of 14 Peregrine Falcons was released in Ontario. OMNR released four peregrines in each of three locations--Algonquin Park, Brockville, and Brock University in St. Catharines. CWS and OMNR, with the assistance of World Wildlife Fund Canada, released two peregrines in Arnprior. All of these hacking operations were co-operative efforts with local naturalist clubs. The public showed a great deal of interest in the releases. The overall release effort was a success, and only one bird is known to have died during the hacking period.

The year 1986 was the initial year of a Bald Eagle release project at the Taquanyah Conservation Area near Cayuga in southern Ontario. Two young eagles were released in a co-operative project of OMNR, the Grand River Conservation Authority, World Wildlife Fund, the Hamilton Naturalists' Club, and Ontario Hydro.

The OMNR and the World Wildlife Fund co-operated in funding a study of rare butterflies and moths in the Pinery Provincial Park and a number of other unique habitats in southern Ontario. The study focused on the biology and specialized habitat requirements of the lupine-feeding karner blue butterfly, which has declined in Ontario and other parts of its range.

A survey was conducted, primarily in eastern Ontario, to identify any new breeding habitats of the Henslow's Sparrow, a threatened species. Although the survey reported several solitary Henslow's Sparrows, no new colonies were found. At present, only one Ontario breeding colony is known, from a survey sponsored previously by OMNR in southern Ontario.

A survey was conducted in co-operation with Manitoba Natural Resources to "radio-track" the winter movements of rare Great Gray Owls in northwestern

Ontario and northeastern Manitoba. This study examined winter habitat use, pre-nesting behaviour and movements, and foraging.

A report was prepared to investigate the status of the southern flying squirrel.

A survey was conducted to identify any Ontario breeding habitats of the endangered Kirtland's Warbler, a species whose primary breeding range is in Michigan's jack pine stands. In spite of thorough searches of apparently suitable habitat, no breeding areas were found.

Trumpeter Swan restoration

Before the settlement of Canada, Trumpeter Swans were fauna of Ontario. They were killed for subsistence and their skins and disappeared.

We are attempting to replace the imported, feral Mute Swan in Ontario with Trumpeter Swans by preventing Mute Swans from reproducing, giving them Trumpeter Swan eggs to hatch, and allowing them to foster-raise the cygnets.

We have overcome the problem of Mute Swans attacking the white-coloured cygnets by dyeing the cygnets before they leave the nest. Also, management of snapping turtle numbers in the release area seems crucial to survival.

Although we are learning a great deal about Trumpeter Swans in this work, the supply of eggs is limited and may be insufficient to establish a viable population. We are examining other possibilities.

Over the past few years we have gratefully received the co-operation of CWS, World Wildlife Fund, Canada Life Assurance Co., Elsa Wild Animal Appeal, the Trumpeter Swan Society, and the Government of Alberta.

Ontario breeding-bird atlas

The Ontario breeding-bird atlas, sponsored by the Federation of Ontario Naturalists and the Long Point Bird Observatory, was undertaken to gather and record information on the occurrences of breeding birds in Ontario. A network of qualified volunteer observers was mobilized to carry out the 5-year survey (1981-85). OMNR and CWS were major contributors to the atlas and provided financial, logistical, and advisory support. Information for the atlas database has already been used by individuals for status reports and scientific papers and by government agencies, universities, and private consultants. The "Atlas of the Breeding Birds of Ontario," which includes distribution maps and written accounts for each species, will be published in September 1987.

Report

NEWFOUNDLAND AND LABRADOR WILDLIFE DIVISION

New policy development

Last year we announced that we were undertaking a comprehensive policy review based on our own needs, the "World Conservation Strategy" and "Guidelines for Wildlife Policy" in Canada. We are following a process involving thorough discussion with all staff before circulating drafts outside the division. It is hoped that a final product will evolve during the next year or so.

Project WILD

After the establishment of a school-based planning/advisory committee to evaluate the suitability of Project WILD for this province's school system, a report to the Department of Education was submitted that recommended a pilot-run in several schools throughout the province. In March 1987, 12 teachers representing all grades from kindergarten to grade 6 and a variety of school environments were trained as pilot teachers. The pilot is scheduled to run from March to October 1987. Following its conclusion, a final decision will be made by the Department of Education on whether it will sanction the use of Project WILD in our schools.

National Wildlife Week

We continue to promote National Wildlife Week through the distribution of 6000 kits to our schools, radio promotion, school visits, and exhibits in five shopping malls throughout the province.

Trapper education

Our first Trapper Education Co-ordinator began work in December 1986. He is hired for at least a 3-year term to establish a continuing course. In addition, he is examining the feasibility of a registered trapline system based on fur management units and of establishing a computerized fur-production monitoring system.

Newfoundland-Maine caribou transfer

We were involved in a highly publicized, international conservation effort during the past year, with the reintroduction of woodland caribou to the State of Maine. The purpose of the project was to take the first step towards re-establishing caribou that were once native to Maine and, in so doing, to try to understand the basis for the disappearance of caribou throughout its southernmost range across North America. The project not only represents a very significant international undertaking, but it also embodies private-sector involvement in wildlife conservation. The primary support for the project in Maine is derived from the Caribou Transplant Corp., a non-profit group founded for the purpose of undertaking this project and raising the necessary funds.

Amidst grueling weather conditions in early December, 27 adult caribou (24 females and 3 males) were captured and trucked to Maine. As of June 1987, 22 animals (20 females and 2 males) survived the trip and have adjusted successfully to captivity at the University of Maine. By the time these proceedings are published, the first crop of calves will likely have been born.

Long-term plans involve the close monitoring via radio telemetry of all animals released to the wild. One of the major questions is: what will be the natural interaction between caribou and *Parelphostongylus tenuis*, the nervous-system nematode harboured by white-tailed deer and known, from experimental infestation, to be fatal to caribou. Perhaps the prevailing environmental conditions, with deer populations at a low point, will allow caribou to become established.

Selective harvest

For a number of years we have had a selective harvest program involving male-only and either-sex licenses for both moose and caribou. In the fall of 1987 we are adding, on a trial basis in three management areas, a calf-only license. The purpose of this change is to increase hunting pressure on the non-productive component of the populations, thereby increasing moose populations in some areas and providing more annual hunting opportunities. We have borrowed heavily from the work of other provinces in this action.

Non-game program

The primary focus of the non-game program was a survey of Peregrine Falcons in Labrador. A nest that was active in 1985 was confirmed to be active again in 1986, and a "new" pair was located. Bald Eagle surveys continued along the north coast of Newfoundland. We estimate the island population to be around 400 pairs. Small-mammal trapping related to a pine marten study on the west coast has confirmed the presence of a breeding population of deer mice which was previously unknown on the island part of the province. Bank voles were also found to be thriving on an offshore island to which they were introduced almost 20 years ago. Also during this past year, raptor surveys have become integral parts of several environmental impact assessments.

Report

PRINCE EDWARD ISLAND FISH AND WILDLIFE DIVISION

Programs and activities of the Fish and Wildlife Division are directed at providing recreational and economic opportunities through the conservation and protection of wildlife and sport-fish resources.

Interest and enjoyment in these renewable resources are shared by the majority of the population. In addition to the obvious importance of fish and wildlife to anglers, hunters, and trappers, a 1981 Canada-wide survey determined that 77% of Islanders surveyed enjoyed wildlife in non-consumptive wildlife-related activities such as watching, feeding, studying, or photographing wildlife. The survey further determined that 78% felt it was important to maintain abundant wildlife populations.

Collectively, over 20 000 angling, hunting, and trapping licenses are purchased annually. This figure does not represent the true participation of anglers and hunters because of a license exemption afforded resident commercial fishermen and their wives, resident farmers and farm labourers and their wives, and individuals under 16 years of age.

The reports that follow summarize projects and activities in the major program areas of the division.

Land acquisition

In 1986, the Fish and Wildlife Division acquired a 40-ha parcel of wooded-wetland habitat abutting the Everglades Ducks Unlimited (DU) Impoundment, Martinvale. This parcel will be managed for the benefit of wildlife and sport fish and for use and enjoyment by the public.

Fisheries

The division is responsible for the maintenance and management of 90 dam sites in the province. Fishways at three dam sites--Scales, Freetown; Affleck's, Bedeque; and Cass's, Covehead--were repaired and converted from vertical slot to pool and weir. As well, repairs were made to Gordon's Pond, Montrose, and safety railings were installed at Paynter's Pond, Long River, and Grigg's Pond, Ellerslie.

A new control structure with fishway and draw-down facilities was constructed at the old Miller's Pond site, Wilmot River at Kelvin. Financial assistance and engineering assistance to the project were provided by Ducks Unlimited (Canada). In addition, Ducks Unlimited provided financial and engineering assistance in the construction of a new control structure at a newly acquired wetland in St. Georges. Ducks Unlimited also sponsored the construction of a new control structure with fishway at Finlayson's Pond, Point Pleasant, providing migratory fish access to the entire water system upstream of head-of-tide.

In an effort to assess the use of fishways by anadromous fish species and to provide insight into the timing and strength of upstream movements, fish traps are installed at selected sites on an annual basis. During the year, upstream movements of fish were monitored at Bell's Pond, New Glasgow; Carragher's Pond, Emyvale; Officer's Pond, Suffolk; and Old Maritime Electric Pond, Valleyfield. Timber baffles were installed in 10 highway arch culverts to facilitate upstream movement of fish.

The division co-operated with the PEI Fly Fishermen's Federation in a habitat-improvement project on the West River, offering both professional advice and financial support. As well, an access road to a borrow pit was modified in Riverdale to prevent silt from entering the West River from adjoining farmland and highways.

A major project dealing with total habitat improvement was initiated in the Montague River watershed in 1986. A submission to Wildlife Habitat Canada was approved, providing necessary funding to establish a demonstration co-operative watershed-management project. This is a 5-year project with funding from Wildlife Habitat Canada for staffing and related expenses. A Project Manager and two technicians have been engaged and are in the process of undertaking Phase 1 of the project. This is a unique approach to land management, and the co-operation and support of several different government departments and private agencies have been excellent.

In an effort to improve angling opportunity, approximately 6000 brook trout were released into nine public dam sites in Queens and Kings counties through the assistance of the Cardigan Fish Culture Station. As well, stocking levels for rainbow trout for O'Keefe's and Glenfinnan lakes were maintained at 9000 and 5000, respectively, whereas approximately 8000 rainbow trout were stocked in three abandoned borrow pits in the Bedford area of Queens County.

The division continued to support Fisheries and Oceans Canada's salmon-enhancement program in the province by providing manpower to assist in the rearing of fish at the Cardigan Fish Culture Station and in the monitoring of returning adult salmon to the Morell River. Fisheries and Oceans Canada continued its programs of semi-natural rearing at Profit's Pond, Bloomfield, and of smolt releases in the Morell and Mill rivers. Results of the 1985 smolt release in the Morell River proved most encouraging, with over 1000 fish returning from early July through November 1986.

The division co-operated with Fisheries and Oceans Canada in collecting brook-trout brood stock from the West and Hunter rivers in an effort to improve the quality of trout at the Cardigan Hatchery, and thus have better-quality fish available for future stocking.

In co-operation with Fisheries and Oceans Canada, the division was involved in a socio-economic survey of resident and non-resident anglers licensed in 1985, as part of a national survey. Preliminary results of the survey indicate that anglers amassed over 300 000 days of fishing and spent over $3.7 million directly in pursuit of their sport. Residents and non-residents alike listed water quality as the single most important factor that contributed to their enjoyment of a day of sport-fishing in the province, whereas the natural beauty of the province and the need to escape from the work-day routine ranked second and third, respectively.

Upland game

Habitat management continues on various division properties across the Island in co-operation with the PEI Forestry Division.

The annual game-harvest results were tabulated for the 1985-86 season. This survey utilized a new sampling base (Firearm Safety Certificate holders), and, as a result, the figures are not comparable with previous years' data. In some cases the estimates obtained may be somewhat inflated, but they cannot be adjusted at this time on the basis of 1 year's data. Game-harvest surveys provide information on long-term population trends, essential to the management of some species. Table 1 presents game-harvest estimates for the past 10 years.

The co-operative pheasant rearing and release program with the PEI 4-H Council was continued in 1986. Fifteen groups of three members each were given approximately 25 pheasants to rear and release. The following 4-H Clubs were involved in the program in 1986: North Shore, Dunstaffnage-Marshfield, Mermaid-Mt. Herbert, Fort Augustus, Winsloe-Brackley, Cloverleaf, Brooklyn-Heatherdale, Lot 16, North River, Albany, and St. Ann's.

As in the past, the Earnscliffe Shooting Preserve was provided with technical and financial assistance in its pheasant rearing and release operation. The preserve provides residents and non-residents with the opportunity to hunt pheasants under natural conditions.

In 1986, efforts were initiated to assess the possibility of successfully introducing Sharp-tailed Grouse on PEI. A habitat assessment on PEI suggests that these birds could successfully establish themselves here. An attempt was made to acquire birds in Manitoba; however, a trapping program by personnel from the University of Manitoba was unsuccessful.

Waterfowl

The program for management of waterfowl habitat consists of the development and enhancement of wetlands for both wildlife habitat and public use. For the past 16 years, Ducks Unlimited (Canada), in co-operation with the Fish and Wildlife Division and private landowners, has developed and improved 90 marshes on PEI totalling 2309 ha and including 257.0 km of shoreline. During the year, three projects totalling 25 ha and 5.6 km of shoreline were developed.

The division continued to sow wild-rice seed on newly flooded impoundments, and assessment of previous plantings continued.

Table 1. Game-harvest estimates for 1976-85.

Year	Licences sold		Ruffed Grouse	Hungarian (Gray) Partridge	Snowshoe hare	Snipe	Woodcock	Black Ducks	Other ducks	Canada Geese
	Resident	Non-resident								
1976	6316	268	16 841	3670	32 903	722	636	20 629	15 317	21 083
1977	6697	414	9 290	3450	29 940	360	380	15 690	12 360	16 770
1978	6848	439	7 870	2330	51 510	1363	286	20 490	13 680	11 756
1979	6261	364	6 625	1800	33 550	1360	30	13 390	10 980	12 670
1980	5864	413	9 740	3100	22 320	780	150	22 690	14 110	18 310
1981	5683	486	8 330	2130	18 860	1000	270	19 660	13 260	15 270
1982	5388	430	11 790	2260	17 440	600	32	19 290	13 120	15 290
1983	5800	493	12 100	2640	22 510	820	140	20 180	12 760	14 030
1984	4846	555	12 080	2100	18 020	150	130	16 840	10 710	14 290
1985	4477	475	15 000	2960	23 800	460	335	25 080	16 500	19 280

Table 2. Summary of PEI winter banding (January and February 1986).

Species	Male	Female	Unknown	Total
Black Duck	442	128	1	571
Black x Mallard hybrid	2	-	-	2
Mallard	3	-	-	3

The waterfowl breeding-pair and brood survey was conducted again in 1986. The survey provides an annual index of waterfowl production for wetlands across the province and aids in regulatory management decisions. The survey is conducted co-operatively with the Canadian Wildlife Service, which provides supplementary field crews and data-analysis services.

The division co-operates with the Canadian Wildlife Service and the Atlantic Waterfowl Council in banding waterfowl to determine migration routes, harvest patterns, and mortality rates for ducks and geese. Division staff were involved in banding waterfowl that overwinter in the province. The results of this winter banding are summarized in Table 2.

Efforts were also directed at banding locally produced ducks (Black Ducks, Blue-winged Teal, Green-winged Teal, Pintail, and Ring-necked Ducks). A total of 110 local ducks was banded during July and August with the assistance of the Canadian Wildlife Service.

The banding program also includes activities related to migratory birds other than waterfowl. Twenty-seven young ospreys were banded in a continuing effort to gain information on migration patterns and mortality factors for young fledged from Island nest sites. This brings the total number banded over the years to 220. In addition, three Bald Eagles and four Goshawks were banded in 1986.

Open water around the bays, estuaries, and rivers of PEI provides winter habitat for waterfowl. Post-hunting-season surveys are conducted in January by states and provinces in the Atlantic flyway to determine the status of waterfowl populations. In mid-January 1986, 4740 Black Ducks, 3113 goldeneyes, and 3088 mergansers, as well as a number of Old-squaw Mallards and Canada Geese, were observed during the mid-winter waterfowl inventory flight.

The division, in co-operation with the Canadian Wildlife Service, is developing a provincial waterfowl-management plan to conserve and enhance waterfowl populations and their habitat for the benefit of future generations. The first draft of the PEI plan was completed in December.

A survey of the breeding status of the woodcock, an important game-bird species in eastern North America, is conducted annually throughout its range. Results of PEI's survey indicated an increase in the breeding index of 7% over 1986. This conforms to the general pattern in the Maritime Region.

A study to determine the food habits of the Double-crested Cormorant was continued during the spring and summer of 1986. Collection of samples was limited to inland freshwater areas. The results of the study will be used in determining future management recommendations for this species.

Furbearers

Division staff continued to monitor, develop, and improve the wild-fur industry in the province through trapper education, research, and management. Total value of wild fur exported from the province for the 1985-86 season decreased to $153 212, mainly because of the substantial drop in average fur prices. Tables 3 and 4 summarize the annual wild-fur harvest and values since 1971-72, the average price and value of fur harvested by species for 1984-85 and 1985-86, and deviations from the 10-year average.

Three trapper-education courses sponsored jointly by the PEI Trappers' Association and the Fish and Wildlife Division were conducted in late October in each county. The courses were aimed at first-time trappers. A new course manual developed co-operatively by the Trappers' Association and the division is scheduled to be available by March 1987.

Although valuable for fur and, more importantly, for creating valued wetland habitat, beaver populations must be properly managed to prevent overpopulation and subsequent damage to roads, woodlots, and agricultural land. Information on sex, age, and reproduction is collected annually for beaver harvested and used, in conjunction with population indices and harvest figures, to determine annual trapping seasons. With expected high prices resulting in increased trapping pressure, the beaver season for 1986-87 was delayed by one month in eastern PEI.

During the year, Fish and Wildlife Division personnel continued to co-operate with Department of Transportation and Public Works personnel in the control of beavers at highway-stream intersects throughout the province. The year 1986 was busy in this regard.

A program to help Islanders cope with the province's latest addition to the natural fauna, the coyote, was initiated in 1986. The Fish and Wildlife Division is working with the Department of Agriculture to educate sheep farmers in techniques to mitigate coyote predation. A coyote-trapping workshop was conducted in June 1986, with the assistance of the Nova Scotia Department of Lands and Forests.

Firearm safety

In 1986 there were 20 firearm-safety courses conducted on PEI. These courses were conducted in community schools, regional high schools (as part of class curriculum), and weekend courses offered prior to the opening of the hunting season.

Of the 603 students who enrolled, 564 successfully completed the course, 23 failed, and 16 failed to write the exam.

A workshop focusing on safe bowhunting was held at Canadian Forces Base Summerside, with 31 volunteer instructors in attendance. As a result of this workshop, an additional four new bowhunters received instruction in PEI, qualifying these individuals to hunt big game in other provinces and states.

There was one non-fatal hunting accident in PEI in 1986.

Table 3. Annual wild-fur harvest and value in PEI, 1971-86.

Year	Beaver	Muskrat	Red fox	Silver fox	Cross fox	Raccoon	Mink	Red squirrel	Weasel	Skunk	Total value
1971-72	Season closed	3639	2694*	N/A	N/A	495	328	9	52	-	$ 68 153
1972-73	Season closed	3183	1897*	N/A	N/A	663	422	80	54	-	$ 74 274
1973-74	198	4554	2169*	N/A	N/A	827	472	153	27	2	$144 695
1974-75	122	4364	1438*	N/A	N/A	680	479	196	47	14	$ 69 682
1975-76	91	4124	1145	13	27	726	527	206	41	16	$104 862
1976-77	342	3826	1027	10	24	1312	537	149	30	11	$125 935
1977-78	254	7986	660	44	88	1435	815	82	18	1	$149 402
1978-79	243	7257	724	32	96	1409	911	63	96	5	$234 026
1979-80	390	5788	944	38	119	2001	805	94	12	26	$263 429
1980-81	327	7661	791	37	91	1730	944	62	29	7	$243 343
1981-82	700	7563	965	26	119	2024	909	106	76	17	$224 777
1982-83	289	8527	995	49	119	1336	635	63	10	-	$164 107**
1983-84	378	9886	994	46	85	1119	718	210	15	-	$195 453**
1984-85	476	8964	1140	27	85	1405	1147	84	45	-	$210 583**
1985-86	485	7269	892	30	46	1284	866	57	24	-	$153 212**

* Included silver and cross phases.

** Includes castoreum value.

Table 4. PEI fur harvest, 1985-86, and comparisons with 1984-85 and 10-year average.

Furbearer	1985-86			1984-85			10-year average (1975-76 thru 1984-85)			1985-86 from 1984-85	1985-86 from year avg.
	Number	Value	Average	Number	Value	Average	Number	Value	Average		
Beaver	485	$21 272	$ 43.86	476	$14 580	$ 30.63	349.0	$ 9 796	$ 28.07	+2%	+39%
Muskrat	7269	31 547	4.34	8964	51 274	5.72	7158.2	43 575	6.09	-19%	+2%
Red fox	892	46 268	51.87	1140	69 962	61.37	938.5	71 518	76.20	-22%	-5%
Silver fox	30	3 351	111.70	27	4 730	175.19	32.2	4 709	146.24	+11%	-6%
Cross fox	46	3 391	73.72	85	11 367	133.73	85.3	11 168	130.93	-46%	-47%
Raccoon	1284	25 192	19.62	1405	27 187	19.35	1449.7	33 787	23.31	-9%	-11%
Mink	866	21 355	24.66	1147	31 370	27.35	494.8	16 905	34.17	-24%	+9%
Red squirrel	57	12	0.21	84	34	0.40	111.9	78	0.70	-32%	-49%
Weasel	24	27	1.13	45	79	1.76	37.2	38	1.02	-47%	-35%
Skunk	-	-	-	-	-	-	8.3	19	2.29	-	-
Coyote	1	30	30.00	-	-	-	-	-	-	-	-
Total		$152 445			$210 583			$191 583		-27%	-20%

Enforcement

Enforcement resulted in 68 violations being registered by enforcement staff under the various acts regulating conservation and protection of fish and wildlife in the province. A summary of violations for the past 8 years is presented in Table 5.

Table 5. Violation summary for 1979-86.

Violation	1979	1980	1981	1982	1983	1984	1985	1986
Assault Peace Officer	-	-	-	-	-	-	4	-
Baiting of waterfowl	-	-	-	-	-	3	1	7
Discharged firearm within 183 m of dwelling	-	-	-	-	-	-	-	-
Exceeding daily bag limit	-	-	-	2	4	1	1	4
Failure to exhibit beaver carcass	-	-	-	-	-	-	-	1
Filling sprayer too close to stream	-	-	-	1	-	-	2	1
Fishing out of season	11	2	16	9	10	2	9	4
Fishing while suspended	-	-	-	-	-	-	2	-
Fishing with more than one line	-	4	5	5	4	4	4	2
Fishing without a licence	3	6	27	20	11	5	6	12
Giving false information	2	3	6	2	2	2	-	4
Hunting in federal sanctuary	2	-	-	-	-	-	-	-
Hunting in Wildlife Management Area	-	-	3	-	-	-	-	4
Hunting on Sunday	-	-	1	1	-	-	1	1
Hunting out of season	1	1	-	3	1	4	-	3
Hunting while suspended	-	-	1	-	-	-	-	1
Hunting with more than one shotgun	-	-	-	-	-	-	-	1
Hunting with unplugged shotgun	-	2	5	2	3	3	3	3
Hunting without a federal permit	-	8	5	3	3	-	-	1
Hunting without a provincial licence	1	6	3	7	4	6	-	-
Illegal excavation pit	-	-	-	-	-	1	2	2
Illegal hunting with a .22 rifle	-	-	-	-	-	-	-	-
Illegal possession of migratory birds	-	-	-	-	-	-	1	-
Illegal transport of migratory birds	-	-	-	-	-	1	-	-
Jigging for sports fish	-	-	-	-	-	1	-	1
Littering highway	1	-	-	1	1	-	-	2
Load falling from truck	2	-	-	-	-	-	-	-

Table 5. (Cont'd)

Violation	1979	1980	1981	1982	1983	1984	1985	1986
Loaded firearm in vehicle	4	1	2	3	3	2	2	6
Molest wildlife	-	-	-	2	-	-	-	-
Net with no licence	-	-	-	-	-	1	-	-
No firearm safety certificate	-	-	-	-	-	-	2	2
No fur-dealers licence	-	-	-	-	-	-	-	2
No permits for green hides	-	1	-	-	1	3	2	1
No tags on snares and traps	-	1	1	1	2	3	1	1
Not checking traps every 48 hours	-	-	-	1	-	-	-	-
Obstructing Conservation Officer	-	-	-	2	-	1	1	-
Obstructing passage of fish	-	-	2	-	-	-	-	-
Shipping fur without export permit	-	-	-	-	-	-	1	1
Spearing salmon	-	-	-	-	-	-	-	-
Transferring of licence	-	-	-	-	-	-	1	-
Trapping out of season	2	5	1	3	5	4	2	2
Trapping within 3 m of a beaver house	-	2	1	-	-	-	-	-
Trapping within a provincial park	-	-	-	-	-	-	-	1
Trapping without a licence	3	1	-	1	2	-	-	-
Trespassing	2	-	-	-	-	-	-	1
TOTAL	34	43	79	70	56	47	48	71

Report

CANADIAN FEDERATION OF HUMANE SOCIETIES

J.H. Bandow
Executive Director

As the Canadian Federation of Humane Societies (CFHS) continues to grow in membership and community support, it reflects an increasing public awareness and concern about all animal-welfare issues. With over 200 000 Canadians supporting its member societies from Vancouver Island to Newfoundland, it is the only national federation of its kind.

Of all wildlife issues, the trapping of fur-bearing animals remains one of the most important issues to the CFHS as a whole, although a number of others continue to concern our members.

Many of our concerns are similar to those of the environmental-protection movement. Reviewing with great alarm the enormous demands made upon our environment by the ever-expanding human population, Dr. Paul Erlich, in his book "The Population Bomb," suggests that at the current rate of growth, there will be 60 billion people, or 100 persons per square yard, on the earth surface, land and sea, 900 years from now. Nature on this fragile planet cannot tolerate a human population even a fraction of that size.

The CFHS shares the concern of environmental-protection groups that we are the species responsible for the unprecedented speed at which other species are becoming extinct. Clearly, all of us must come to the defence of the natural world and all of our fellow species. Otherwise, we will condemn ourselves to increasingly impoverished lives, as other life forms that make up the complex ecosystem are driven off the face of this earth. As Dr. Erlich writes, "In pushing other species to extinction, humanity is busily sawing off the limb on which it is perched."

The CFHS continues to be concerned that, although surveys show favourable attitudes by the Canadian public towards large viable wildlife populations, the preservation of endangered species, and, by and large, a non-consumptive approach to wildlife, much of government wildlife policy is directed towards the consumptive use of wildlife to satisfy the immediate needs of a relatively small percentage of Canadians.

The CFHS supports programs and organizations that promote awareness and a balanced sensitivity towards all living things. We are, therefore, interested in what all of you do in your programs. We want to work with you where our objectives coincide, and we want to make you aware of our concerns where they differ.

At this point I would like to deal with a number of concerns that have been raised over the last 12 months.

Predator management

From polar bears in Manitoba, to wolves in British Columbia and Alberta, to wolves and grizzlies in the Yukon, to seals in the Maritimes, it would appear that predator control is gaining momentum. We are concerned that programs to institute controls often appear to be the result of data insufficient to justify such programs, and the methods of predator control often raise even greater public concern.

From the distribution of poison bait to the shooting of predators by rifle-toting wildlife officers from aircraft and helicopters, there is increasing concern by the public about not only how the animals are exterminated, but if indeed there is a justifiable reason to do it at all.

Although in some cases it is argued that predator-control programs are instituted to protect property of citizens, in many areas of the country predator-control programs reflect the position of wildlife departments that place a higher priority on what has been described as "goal-oriented politics" than on "answer-oriented science."

The CFHS remains concerned that many of today's predator-control programs appear to be designed to cater to the minority of the public that hunts.

Game ranching

The CFHS is alarmed about the interest in many parts of this country in legalizing big-game ranching for the sale of wildlife breeding stock, meat, and by-products, such as hides, antlers, gall bladders, tails, and genitals.

We are concerned for a number of reasons. We believe that establishment of these "game ranches" will increase poaching once the legal market for wild meat has been developed. We are further concerned that ranching of these animals will bring increased demands for more predator control because of the nature of the animals identified for big-game ranching. We have very serious concerns about the handling and transportation associated with the slaughter of these animals, because there is ample evidence that they do not readily adapt to handling and transportation.

Sealing

Members of the CFHS view with a great deal of concern the resumption of the commercial taking of seals, particularly because there appears to be little evidence that the products will find a ready market, and because there is every indication that the 1986-87 hunt for harp and hooded seals is primarily a "protest kill."

The CFHS is also opposed to an unrestricted cull of grey seals on Sable Island. We believe that there has been insufficient research done to justify this activity.

Trapping

The CFHS is opposed in principle to trapping, because the vast majority of animals is not trapped humanely. We insist upon a humane death or humane capture and the use of the best trapping system available. We are seeking elimination of the leg-hold trap and the standard snare. We are demanding mandatory trapper education, humane trapping regulations, trap research, and trap exchange. We also insist that traps be tended at least daily, and that they should be available only to licensed trappers from authorized outlets. We will continue to educate the public about animal suffering caused by trapping and about the urgent need for improved capture methods.

Over the years, the CFHS, through its Humane Trap Development Committee, has worked diligently with government, the fur industry, and the trapping community to bring about urgently needed changes. Although we are encouraged to hear and read the statements of a number of leading trappers and trapping-industry publicists urging trappers to enact the types of humane trapping regulations and mandatory education courses we have been seeking, we are greatly concerned about the apparent lack of long-term goals and achievement dates, particularly as this relates to the development and research of more humane and specific trapping systems.

When we compare the proposed allocation of funds to major international communication programs, including public relations, counselling, advertising, research publications, newsletters, spokesperson programs, coordinating media tours to Canada, monitoring animal-rights groups, and liaison with the UK fur industry, with the proposed allocation of funds for trap research and trapper education, we are concerned about the industry's emphasis.

Patience of our member organizations and support for our current policy are rapidly diminishing, and a number of the CFHS's members now have policies that are opposed to the fur industry.

The CFHS has been very much encouraged by the research work of the Fur Institute of Canada's Humane Trap Research Development Committee at the Alberta Environmental Centre in Vegreville. However, we must reiterate that unless there is a more concentrated thrust and a cohesive plan that gives some indication that the trap-development programs have been developed with appropriate long-term goals and short-term objectives, and with maintenance and implementation strategies firmly in place, we are concerned that another 50 years will pass before we see humane trapping systems in the field for most of the species currently being trapped.

In closing, let me reiterate that the interest of the CFHS is animal welfare. That, of course, includes wild-animal survival and protection from pain and suffering. Because virtually everything hinges upon the protection of habitat, it is imperative, with any wildlife-management program, to include conservation policies that will protect and ensure maintenance of wildlife habitat. When consumptive use of wildlife by man is considered, if indeed consumptive use can be considered an "appropriate" use by man, it is imperative that the capture or killing of wild animals be done only by individuals who are knowledgeable about the animals and their habitat, are thoroughly skilled, and use only the most appropriate tools that will preclude or greatly minimize animal suffering.

The responsibility of stewardship is awesome--we must take this responsibility seriously. Even though those concerned with animal welfare and wildlife managers do not always agree on all issues, a harmonious working relationship is imperative for the sake of the animals.

Report

CANADIAN WILDLIFE FEDERATION

K.A. Brynaert
Executive Vice-President

We are encouraged by the tremendous interest and concern among political leaders and Canadians about conservation and environmental protection, as evidenced by the numerous international conservation-related conferences hosted in Canada over the past year.

The establishment of the National Task Force on Environment and Development by the Canadian Council of Resource and Environment Ministers is one important manifestation of this growing interest. The preparation of provincial conservation strategies in Alberta, Prince Edward Island, and Ontario, among other provinces, and regional conservation strategies, such as the Arctic Marine Conservation Strategy and the Inuit Regional Conservation Strategy, are further examples.

In our view, however, a crucial need remains yet unsatisfied. Federal, provincial, and territorial governments must develop a broadly harmonious viewpoint on major conservation policy themes and arrange for effective program co-ordination while allowing appropriate expression of regional and local determinants. The next step, then, is that representatives of Canadian governments and interest groups must work out a strategy for achieving conservation across Canada. Interested and responsible Canadians should have the opportunity to consider how best to manage and conserve renewable resources to ensure that development is sustainable and the environment is protected. It is imperative that the discussion be firmly placed in the context of the economic problems of the 1980s and clearly reflect the aspirations of the Canadian public for their nation's development.

Canadian Conference on Sustainable Development

As initiators and co-sponsors of the 1986 World Conservation Strategy Conference and related activities, the Canadian Wildlife Federation (CWF) has expressed a deep commitment to the concept of sustainable development--a commitment that we believe is shared by all responsible wildlife agencies and organizations concerned about the future of our resources. It is our intention to continue to vigorously promote acceptance of the principles of sustainable development as the force unifying seemingly disjunct objectives of economic development, resource conservation, and environmental protection.

In spite of the advances achieved in stimulating greater interest and concern in conservation and the environment in recent months, it is our view that full advantage must be taken at this opportune time to ensure that Canadian conservation goals will be furthered. We therefore have proposed that a major conference--the Canadian Conference on Sustainable Development--be convened that would have as its goal the preparation of a Canadian Conservation Strategy.

A key to the success of this conference is to ensure that economists, bankers, business people, agriculturalists, and industrialists represent a significant portion of speakers and delegates. Government participation must include representation from economic portfolios such as Finance and Regional Industrial Expansion, as well as Environment. We must avoid the pitfalls of preaching to the converted in the innumerable symposiums, conferences, and workshops held each year.

The CWF has already invested considerable effort in recent months towards promoting acceptance of the idea for such a conference, which could be modelled on the 1961 Resources For Tomorrow conference. We are pleased to report that strong expressions of support have resulted from a number of provincial and territorial governments, as well as the federal Minister of Environment. We would strongly urge all jurisdictions that have not yet voiced their view to seize this excellent opportunity and lend their support to this worthy initiative.

Public perception of conservation

Last year, in my report to this conference, I stated that we have arrived at a critical period in the history of conservation in Canada--a period that marks the threshold of a new phase in which we may anticipate major changes in the manner in which we deal with wildlife and management concerns and issues in the future. The CWF is confident that through genuine co-operative efforts, viable options are possible to satisfy the long-term requirements of our resources. What we remain less certain about is the threat posed by animal-rights influences on public perception of conservation.

I have on numerous occasions expressed the CWF's serious apprehensions about the very real destructive potential of these groups to undermine conservation as it is now known and practised in Canada. I do not intend to reiterate these concerns. However, I would suggest that, given the positive climate of public receptiveness and support for sustainable development--particularly with respect to the increased levels of awareness about conservation as a result of the recently released Brundtland Commission report--it is critical that we capitalize on this special opportunity to clarify public understanding of the true meaning of conservation.

We perceive the proposed conference mentioned earlier as one effective means of accomplishing this objective within our own boundaries. However, it will clearly not be enough to curtail the rising acceptance of the preservationists' philosophies in the international arenas. I can assure you that the CWF has maintained an intense level of activity throughout the past year in an effort to retain a balance of views. Specific actions include our central role in the co-ordination of an ad hoc committee of concerned organizations to review Convention on International Trade in

Endangered Species (CITES) rules and procedures for the purpose of ensuring that decisions arising from this forum will be responsible and founded on scientific grounds. Your expression of support and active co-operation will be critical to any success achieved in the weeks ahead.

Other activities

Apart from our involvement in the numerous international and North American events characteristic of this past year, we have engaged in a wide variety of activities. These include our submissions to the US Department of the Interior regarding the draft Arctic National Wildlife Refuge, Alaska, Coastal Plain Resource Assessment, the Wildlife Legislative Steering Committee in Nova Scotia, and the Canadian Institute of Forestry on sustainable development of forest resources.

As most of you are aware, the CWF undertook a leading role in sponsoring an independent 3-year investigation into the status of our freshwater fisheries as a result of serious apprehensions about the escalating deterioration of these resources. I am pleased to announce that the results of Phase I of our investigation have been published and are currently available for review.

Our purpose is to document the present status of commercial, recreational, and subsistence fisheries and to identify the resource, habitat, science, and management issues that must be addressed. At the present time, we are engaged in Phase II of this major undertaking under the able direction of Dr. Peter Pearse of the University of British Columbia. We anticipate that the final report, which will set out strategies for effective management, will be completed by year-end.

Project WILD and the Conservation Centre

Before closing, I would like to provide a brief update with respect to Project WILD and conclude my remarks with comments about our recent project for conservation--the world-class Conservation Centre.

As most of you are aware, CWF officially launched Project WILD in 1984. I am pleased to report that we now have seven jurisdictions participating, including the World Wildlife Fund, namely British Columbia, Alberta, Saskatchewan, Manitoba, Ontario, Nova Scotia, and Newfoundland-Labrador. We are looking forward to anticipated sponsorship from New Brunswick, the Yukon, and Prince Edward Island in the near future. We have also completed our draft manuscript of the French edition, which we expect to publish by the end of this year. Our next major initiative is to create an Aquatic Supplement for introduction in 1988.

Finally, I would like to discuss our progress with respect to the Conservation Centre--CWF's Silver Anniversary Project, which has been dedicated as a Centennial Year contribution.

We are very encouraged by the tremendous interest our project has generated among various governmental agencies. This new facility is intended to house CWF's headquarters. However, it will be more than a building! Our purpose is to create a facility symbolic of our commitment to conservation and sustainable development--a world-class centre that in itself will be a physical expression of Canadians living in harmony with their environment and resources. To accomplish this task, we will require the participation, co-operation, and support of provincial, territorial, and federal agencies. Because our aim is to develop a world-class site, we intend to approach all jurisdictions to consider a partnership role with us and be represented in this unique, ambitious undertaking.

At the present, we have commenced with initial planning. During the next several months, potential sites already made available for consideration will be explored and evaluated.

By year-end, we expect to complete the first phase of our planning process and identify a suitable site within the National Capital Region. Our next step will be to develop a detailed proposal for your consideration. We will be recommending that time be made available at next year's Federal-Provincial/Territorial Wildlife Conference for a formal presentation, so that this exciting and innovative undertaking may be discussed at length.

Report

WILDLIFE HABITAT CANADA

Catalyst role

Wildlife Habitat Canada's (WHC) catalyst role fosters the development of the following:

(1) Multi-disciplinary and comprehensive habitat programs

1986-87 - WHC continued to develop various types of long-term agreements within Ontario, British Columbia, Alberta, Saskatchewan, and Manitoba. These range from land acquisitions/management to private stewardship programs.

1987-88 - WHC will pursue a wetland agreement with Quebec, New Brunswick, and Prince Edward Island, and will continue active participation in the Prairie Habitat Joint Venture under the North American Wetland Management Plan.

(2) Innovative approaches in habitat management

1986-87 - WHC continued to support the development of three prairie-pothole landowner pilot projects, the New Brunswick forestry/wildlife pilot project, and a new comprehensive watershed-management pilot in Prince Edward Island.

1987-88 - WHC will participate in the development of forestry/wildlife programs in Nova Scotia and Newfoundland.

- WHC will host a workshop on landowner contact/private stewardship.

(3) New funding mechanisms

1986-87 - WHC expanded the Wildlife Habitat Conservation Stamp and Print program through additional co-operative fund-raising mechanisms with both non-governmental wildlife organizations and other interest groups.

- WHC developed an insurance-funding program.

1987-88 - WHC will expand the Stamp and Print program, preferably with Habitat Coalition members.

Assessment role

WHC's assessment role leads to the following:

(1) Providing a national perspective on the status of habitats

1986-87 - WHC released "The Status of Wildlife Habitat in Canada: Problems, Issues and Opportunities," a benchmark publication.

1987-88 - WHC will begin to develop a complementary document to the status report, focusing on agriculture and wildlife.

(2) Providing independent assessments of federal policies and legislation that impact on habitat

1986-87 - WHC helped examine the benefits of incorporating habitat incentives into crop-depredation control and compensation programs.

- WHC began an examination of wildlife habitat conservation opportunities under future federal/provincial forestry agreements and from softwood taxes.

- WHC helped develop a non-governmental organization national wetland conservation policy.

1987-88 - WHC will examine the potential use of depreciation allowances for conservation purposes under income-tax laws.

Support role

WHC's support role means the following:

(1) Providing funds for co-operative habitat endeavours

1986-87 - approximately $7 million was approved for 37 additional habitat projects in co-operation with a wide variety of agencies across Canada, of which $2 million was allocated in 1986-87.

1987-88 - WHC will develop a similar number of projects.

(2) Providing expertise

1986-87 - WHC continued to examine the socio-economic values of wetlands.

- WHC announced a research program associated with agriculture/wildlife, forestry/wildlife, and critical wildlife habitat.

1987-88 - WHC will implement a research program including in-house and grant components and will announce a scholarship program.

(3) Co-operative support to communication and public-education programs

1986-87 - $220 000 was provided for three communication projects and four educational facilities.

1987-88 - WHC will co-host a workshop to review interpretation facilities and available educational materials.

A summary of WHC actions

WHC's nine-member Board of Directors represents a wide range of conservation/environmental/economic interests, with representatives from industry, government, and wildlife organizations.

WHC's aim of conserving, restoring, and enhancing wildlife habitats throughout Canada is achieved through:

- acting as a catalyst to encourage innovative, multi-disciplinary action, including new incentives to landowners;
- assessing the impact of legislation, policies, and programs on habitats; and
- financially supporting co-operative habitat projects of direct benefit to wildlife.

WHC defines wildlife in the broadest sense, and has supported habitat projects for mammals, plants, reptiles, birds, and fish, including the protection of endangered species such as the furbish's lousewort, the small white lady's slipper, the blue racer snake, the Burrowing Owl, the American White Pelican, and the Saint Lawrence beluga whale.

Projects financially supported by WHC since its inception in 1984 have included the following:

- the conservation of over 25 000 ha of land across Canada, the majority of which is wetlands, at a total cost to WHC and its partners of over $18 million, including $2.9 million from WHC which has created approximately 135 jobs nationally;
- more than $625 000 has been spent on habitat-enhancement projects;
- in conjunction with provincial governments and local conservation groups across the country, WHC has long-term conservation programs in each of the provinces and territories covering diverse habitat needs;

- $1 million has been spent on habitat research;
- 58 organizations have joined with WHC in land-conservation projects;
- 17 organizations have joined with WHC in habitat-enhancement projects;
- 26 partnerships have been formed with WHC for habitat-research projects; and
- 19 partnerships have been formed with WHC for long-term habitat-conservation projects.

WHC policy respects and maintains traditional uses (hunting, fishing, trapping) of lands containing project areas. Any project that WHC enters into requires the development of a management plan together with the project proponents and responsible government wildlife agencies.

In summary, WHC is participating in 90 habitat projects, along with 20 community-education projects and several internal research initiatives.

In 1986, WHC published "The Status of Wildlife Habitat in Canada: Problems, Issues and Opportunities," a report designed to increase understanding, focus attention, and stimulate action on the protection and management of wildlife habitat in Canada.

The 1987 artist for the Stamp and Print program is George McLean. The painting is entitled "On the Wing--Canada Geese." The artists selected for 1988 and 1989 are R. Bateman and J.L. Grondin.

Revenue, to date, from the sale of Wildlife Habitat Conservation Stamps to hunters and collectors has totalled over $4 million. Over 1 million stamps have been sold across Canada and elsewhere. Revenue from the sale of limited-edition prints has totalled over $3 million.

Table 1. Habitat and research projects approved by WHC's Board of Directors on 28 November 1986.

Newfoundland	1.2	Woodland Caribou/Logging Study	- 4-year study to assess impacts of timber harvesting on woodland caribou and to generate acceptable alternative harvesting strategies
Quebec	5.13	Lac St. Charles	- Acquisition of 75.42 ha of shoreline wetland habitat
	5.18	Île Brion	- (Conditional approval) Acquisition of a 669.8-ha island in the Magdalen Archipelago along the St. Lawrence River
	5.19	Baie de l'Île Verte	- 5-year habitat-enhancement program
	5.22	Île du Milieu	- Acquisition and enhancement of 165 ha of an island in the Lac St. Pierre Archipelago
	5.23	Fondation de la faune du Québec	- (Conditional approval) Co-operative habitat projects
	5.25	Au Petit Marais de Saint-Gédéon	- Acquisition of 21.32 ha of shoreline wetland and dune habitat
Ontario	6.22	Lynde Shores	- Acquisition of 56 ha of Class I wetland on the north shore of Lake Ontario
	6.32	Cooper Marsh	- Habitat enhancement of 62.5 ha of wetlands on shore of Lake St. Francis
	6.34	Ojibway Prairie	- (Conditional approval) Acquisition of 9.2 ha of tall-grass prairie
	6.35	Cavan Bog	- Acquisition of 8.1 ha of unique wetland habitat
Manitoba	7.9	Small White Lady's Slipper Site	- Protection of 2-ha site of this endangered plant
	7.11	Elk Habitat Management Plan	- Habitat manipulation of 52 km^2 within Duck Mountain Provincial Park
	7.14	Monitoring Program for Prairie Waterfowl Habitat Conservation Initiatives	- 6-month research and evaluation program

Table 1. (Cont'd)

Saskatchewan	8.9	Saskatchewan Heritage Marsh Program	- 10-year wetland-conservation program
	8.11R*	Wetland Margin Habitat Study	- 6-year program to investigate feasibility of using salt-tolerant forage crops to reduce soil salinity and improve waterfowl nesting cover on margins of discharge wetlands
Alberta	9.4	Upper East Branch Canal	- Development of an effective irrigation-canal rehabilitation program
British Columbia	10.36	Pacific Estuary Conservation Program	- 3-year program to acquire, reserve, and enhance an estimated 7500 ha of coastal freshwater and marine estuarine habitat
	10.37	Boundary Lake--Phase II	- To acquire and enhance 276 ha of lakeshore property on Boundary Lake, a Class I wetland
Yukon Territory	12.2	Identification and Protection of Key Habitat	- 3-year "start-up" grant to assist the newly created Habitat Management Section of the Fish and Wildlife Branch to develop an effective habitat-management program
	12.3	Ethel Lake/McArthur Mountains Area	- Assist in the development of the habitat component of a co-operative wildlife-management plan for big game
National	13.15R	Grazing Systems for Waterfowl Habitat Conservation: An Evaluation and Guidelines for Implementation	- 6-month program to examine grazing systems with potential application to Prairie Canada and to predict the most appropriate strategy for a particular range

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* R = Research project.

Table 2. Communication and education projects approved and funded by WHC's Board of Directors up to 29 May 1987.

Newfoundland	1.4C	Newfoundland Freshwater Resource Centre	- Interpretive facilities as part of an urban wildlife educational complex
Quebec	5.15C	S.O.S.	- Travelling exhibit on endangered species
	5.17C	Franc-Nord Magazine (UQCN)	- Three articles on habitat-conservation issues in Quebec
	5.24C	Marine Bird Conservation Program	- Summer education program, Quebec North Shore region
	5.27C	Pointe Noire Coastal Station	- Interpretation program--beluga whale habitat
	5.30C	Public Awareness--Quebec Wetlands	- Four-part program to highlight the status of wetlands in Quebec
	5.31C	Wild plants of Quebec	- Field-guide to wild plants of lakes, marshes, and rivers
	5.34C	Pte-aux-outardes Interpretation	- Interpretation facilities for a unique salt marsh
Ontario	6.8C	Wye Marsh Interpretation Centre	- Development of a wetland appreciation/interpretation program
	6.18C	Landowner Contact Program	- Natural Heritage League's 3-year program
Manitoba	7.12C	Waterfowl Garden	- Education program featuring a variety of habitats
Saskatchewan	8.7C	Wakamow Valley	- Interpretation projects, Moose Jaw River Valley
Alberta	9.10C	Conservation Manual	- Layman's guide to land-designation procedures
	9.11C	Habitat Reclamation Manual	- Field-guide for industry use
British Columbia	10.4C	Westland TV Program	- Interior BC habitat-conservation initiatives
	10.22C	Reifel Refuge	- Improvements to interpretation program
	10.24C	Deer/Elk Habitat Handbook	- Field-guide for coastal forest/wildlife integration
	10.25C	Forest Habitat Handbook	- Field-guide for pilot in forest-operations modification
	10.43C	Wildlife Federation Portable Exhibit	- Travelling exhibit on habitat conservation

Report

CANADIAN WILDLIFE SERVICE INTERNATIONAL ACTIVITIES

International conventions and conferences

The Canadian Wildlife Service (CWS) has been involved in the preparations for two major international conferences that will be hosted by Canada during 1987--the Ramsar and CITES conferences.

The 3rd Meeting of the Conference of the Parties to the Convention on Wetlands of International Importance (Ramsar Conference) will be held in Regina from 27 May to 5 June 1987. It will attract delegates and observers from 40-50 countries. CWS (Western and Northern Regions) has co-ordinated preparations for the meeting. Eleven new Canadian Ramsar sites have been accepted by the International Union for Conservation of Nature and Natural Resources (IUCN) for inclusion in the List of Wetlands of International Importance.

The 6th Meeting of the Parties to the Convention on International Trade in Endangered Species (CITES Conference) will be held in Ottawa from 12 to 24 July. Delegates and observers from at least 90 nations are expected to attend (see CITES report).

CWS national delegates to the International Waterfowl Research Bureau (IWRB) attended the 32nd Meeting of the Executive Board in Slimbridge, England, in September. Discussions concerned the future role of IWRB and proposed amendments to its constitution. These topics will be discussed at the 33rd Meeting, to be held just prior to the Ramsar Conference in Regina, on 26 May 1987.

Canada hosted the 19th International Ornithological Congress (IOC) in Ottawa from 22 to 29 June 1986. CWS co-hosted the congress in conjunction with the National Museum of Natural Sciences. Although the latter organization was the lead agency, CWS was a major participant in planning, organizing, and funding this congress. Attendance by more than 1500 delegates from 91 countries made this the largest meeting of the world's ornithologists ever held. A Standing Committee of the IOC was established to look at issues in applied ornithology; the CWS representative will be the secretary.

At the request of the International Council for Bird Preservation (ICBP), CWS organized an international symposium on Birds as a Socio-economic Resource for the 19th ICBP Conference held in Kingston from 15 to 21 June 1986. CWS also chaired a workshop on Birds as Bio-indicators during the meeting. The proceedings are being edited by CWS and will be published by ICBP during 1987.

CWS discussed the Convention on the Conservation of Migratory Species of Wild Animals (Bonn Convention) with an official of the secretariat during his visit to Ottawa in September. The convention, adopted in Bonn in 1979, entered into force in 1983 after accession by 15 parties. Canada has not chosen to become a party to this convention, nor have other western-hemisphere states except Chile (Paraguay and Jamaica have signed but not ratified the convention). Species of concern to Canada seem to be adequately addressed by conventions to which we are already party.

International working groups and research programs

CWS participated in negotiations in the Canada-USSR Arctic Science Exchange Program under Theme II--Northern and Arctic Environment. Projects that were agreed to included a study of the dynamics and migrations of Lesser Snow Geese in the USSR and North America in order to protect and conserve populations.

The Technical Committee set up by the International Organization for Standardization to develop international humane trapping standards held its first meeting in Quebec City in March. Four of the seven countries that expressed interest in participating in this effort were able to send representatives. Canada was nominated to chair the committee for 3 years. Three working groups were established to carry forward various aspects of the standard drafting process, and this initiative is expected to bring other countries into the program.

The CWS Latin American Program funded projects in 1986, including further collection and toxic-chemical analysis of prey species of Peregrine Falcons in Venezuela, a contribution to the National Museum of Natural Sciences survey of shorebirds in Guyane française, studies relating to salinity, water depth, and tern and shorebird distribution in Lagoa de Peixe, Brasil, and the provision of materials and CWS expertise for a banding workshop and field course at Paracas, Peru. A study relating forest clearance in Central and South America to forest-bird populations in Canada was completed.

Work continued on the production of the South American Shorebird Atlas. Processing of data and preparation of text and maps were completed. In September 1986, a series of aerial surveys was done along the north-central coast of Brasil in co-operation with the Brasilian mining company, Companhia Vale do Rio Doce (CVRD), to determine staging areas used by Nearctic shorebirds. Previous surveys with CVRD in January 1986 had identified this region as one of the most important wintering areas for shorebirds on the north coast of South America. Results from the previous surveys were presented at an international seminar organized by CVRD in Belem, Brasil. It was attended by a wide range of government agencies and international conservation organizations.

International studies of shorebird migration patterns have led to an initiative to set up a Western Hemisphere Shorebird Reserve Network (WHSRN). A council has been established by the International Association of Fish and Wildlife Agencies (IAFWA) to oversee the implementation of the network. Canada will be represented on the council by a CWS member. Agreement has been reached with New Brunswick to create the first Canadian reserve in the Shephody Bay Area in 1987.

International advice and information exchange

CWS provided information and advice to many international groups and projects, including:

- the World Wildlife Fund
- IUCN
- IUCN Commission on Ecology
- IUCN specialist groups
- IWRB research groups
- ICBP specialist groups
- the Organization for Economic Co-operation and Development (OECD) Hazard Assessment Group
- the OECD Environmental Data Compendium
- the United Nations Economic Commission for Europe (ECE) Compendium of Environmental Statistics
- the International Council of Scientific Unions (ICSU) International Geosphere-Biosphere Program
- International Union for Game Biologists (IUGB)
- Environmental Management Development in Indonesia (EMDI)
- the Bombay Natural History Society
- University of Coahuila, Mexico
- University of Mexico, Mexico
- Ehime University, Matsuyama, Japan
- Yamashima Institute of Ornithology, Japan
- International Air Transportation Association (IATA)

Report

COMMITTEE ON THE STATUS OF ENDANGERED WILDLIFE IN CANADA (COSEWIC)

J. Anthony Keith
Chairperson

This is the 10th report of the Committee on the Status of Endangered Wildlife in Canada (COSEWIC) to the Federal-Provincial/Territorial Wildlife Conference (FPTWC). COSEWIC is mandated by this conference to determine the status in Canada of wild species whose future may be in doubt, and to release the information upon which the declaration of status is based.

Classification actions

COSEWIC assigned status to 36 species and populations on 7 April 1987. Six of the species had been previously studied by COSEWIC and were re-evaluated this year.

Committee decisions, based on status reports and agreed status definitions, were as follows:

Rare:

- Lilaeopsis (*Lilaeopsis chinensis*)
- Swamp rose mallow (*Hibiscus moscheutos*)
- Victorin's water hemlock (*Cicuta maculata*)
- Victorin's gentian (*Gentiana victorinii*)
- Green sturgeon (*Acipenser medirostris*)
- Redside dace (*Clinostomus elongatus*)
- Silver shiner (*Notropis photogenis*)
  (Re-evaluation--confirmed as "Rare")
- Squanga whitefish (*Coregonus* sp.)
- River redhorse (*Moxostoma carinatum*)
  (Re-evaluation--confirmed as "Rare")
- Fin whale (*Balaenoptera physalus*)
- Pacific sardine (*Sardinops sagax*)

Threatened:

- Red mulberry (*Morus rubra*)
- American chestnut (*Castanea dentata*)
- Gold crest (*Lophiola aurea*)
- Short-nosed cisco (*Coregonus reighardi*)
- Copper redhorse (*Moxostoma hubbsi*)

Threatened: (cont'd)	Lake Simcoe whitefish (*Coregonus clupeaformis*)
	Shortjaw cisco (*Coregonus zenithicus*)
	Deep water sculpin (*Myxocephalus thompsoni*)
Endangered:	Spotted wintergreen (*Chimaphila maculata*)
	Aurora trout (*Salvelinus fontinalis*)
	Mountain Plover (*Eupoda montana*)
Extirpated:	Blue-eyed Mary (*Collinsia verna*)
	Walrus (*Odobenus rosmarus*) (Gulf of St. Lawrence population only)
	Gravel chub (*Hybopsis x-punctata*)
	Paddlefish (*Polydon spathula*)
	Gray whale (*Eschrichtius robustus*) (Atlantic population only)
Extinct:	Banff long-nosed dace (*Rhinicthys cataractae*)
Not in any category*	White Pelican (*Pelecanus erythrorhynchos*) (Re-evaluation--previously "Threatened")
	Golden Eagle (*Aquila chrysaetos*)
	Gyrfalcon (*Falco rusticolus*) (Re-evaluation--confirmed as "Not in any category")
	California sea lion (*Zalophus californianus*)
	Stellar sea lion (*Eumetopias jubatus*)
	Narwhal (*Monodon monoceros*) (Re-evaluation--confirmed as "Not in any category")
	Gray whale (*Eschrichtius robustus*) (East Pacific stock only)
	Green sunfish (*Lepomis cyanellus*)
	Longear sunfish (*Lepomis megalotis*)

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* Status reports were reviewed and the species were determined not to be "Rare," "Threatened," "Endangered," "Extirpated," or "Extinct."

Table 1. COSEWIC status designations as of April 1987.

Category (status)	Birds	Mammals (terrestrial)	Mammals (marine)	Fish	Plants	Amphibians and reptiles	Total
Rare	16	6	2	21	14	1	60
Threatened	7	4	1	6	13	-	31
Endangered	8	4	5	4	15	1	37
Extirpated	-	2	2	2	1	-	7
Extinct	3	3	-	3	-	-	8
Total	34	18	10	36	43	2	143

In addition, COSEWIC has reviewed status reports on 31 species and determined that their status was not rare, threatened, endangered, extirpated, or extinct.

Other COSEWIC highlights

(1) COSEWIC notes with pleasure the record number of status reports (36) completed during the past year, far surpassing previous productivity. The record is due in part to COSEWIC "gaining momentum" (and experience), and is partly the result of work initiated years ago that was successfully completed this year.

(2) COSEWIC's 10th year of status assignment was marked by the first delisting of a species. The White Pelican, formerly "Threatened," is now "Not in any category." This colonial nesting bird has started new colonies and has increased in total numbers so much that there is now no apparent threat to its continued existence in Canada, if current levels of protection are maintained.

(3) COSEWIC's first decade was also marked by sobering news: the recent extinction of a small fish, the Banff long-nosed dace. After a tenuous existence in one part of an unusual habitat, the species has succumbed to a combination of adverse factors, including alteration of habitat, sewage contamination, introduced competitor species, and hybridization with a closely related species.

(4) COSEWIC draws attention for the second time to the high productivity of the Fish and Marine Mammals Sub-committee and to the work of its Chairperson, Dr. Robert Campbell, Fisheries and Oceans Canada, and particularly notes the large number of species successfully dealt with, improvements in funding arrangements, and Bob's personal energy on behalf of COSEWIC.

(5) COSEWIC notes with gratitude, for the second consecutive year, the high productivity of the Plants Sub-committee under its Chairperson Dr. Erich Haber of the National Museum of Natural Sciences (Botany Division). Erich obtains excellent status reports, publishes condensed versions in professional-level journals on behalf of COSEWIC, and presses on in the face of very limited funds available to contend with the largest group of species known to be at risk.

(6) COSEWIC also draws the attention of the FPTWC to critically inadequate funding of status-report production by member jurisdictions. COSEWIC arose in response to a resolution of this conference. Many jurisdictions have responded with manpower and money during COSEWIC's first decade, but response has not been uniform. This is currently hampering completion of a first-priority national list.

Over the years COSEWIC has had to rely very heavily on funds provided by the private sector (chiefly by or through World Wildlife Fund Canada) and by the federal level--often for species that are the responsibility of provincial and territorial governments. Although COSEWIC members understand that funds are in short supply everywhere, we point out that our contracts for status reports are economical and efficient, averaging $1500 or less. We obtain them through volunteer chairmen of our sub-committees and their volunteer colleagues. Only outside authors are paid for their work.

I request that directors of provincial and territorial wildlife agencies consider how they might provide additional resources to produce COSEWIC status reports. This can be done by providing money to pay for the writing of status reports by contract, or by providing the time of provincial or territorial staff to write status reports.

Report

CONVENTION ON INTERNATIONAL TRADE IN ENDANGERED SPECIES OF WILD FAUNA AND FLORA (CITES)

Preparations for the Sixth Meeting of the Conference of Parties to CITES

The year 1986, being the year between biennial meetings of the Conference of Parties to CITES, was a quiet year for international matters. A considerable amount of time was, however, spent on preparations for the Sixth Meeting of the Conference of Parties to CITES to be held in Ottawa during July 1987.

Before deciding upon Ottawa as the location for the 1987 biennial meeting, we checked convention facilities in Vancouver, Banff National Park, Montreal, Quebec City, Charlottetown, and Ottawa. Although cities such as Montreal do have appropriate convention facilities, they lack the international embassy or consul representatives that are very necessary for foreign-government delegations visiting Canada. Following consultations with the CITES Secretary General, it was agreed that the Sixth Meeting of the Conference of Parties to CITES would take place in Ottawa. After viewing appropriate facilities, we agreed that the meeting of between 600 and 700 delegates from at least 90 nations would be held in the Ottawa Congress Centre. An appropriate contract has been signed to lease the Centre for the period of the meeting, 12-24 July.

As host state for the meeting, Canada has to provide equipment such as public-address systems, word processors, electric typewriters, telephones, and photocopiers, as well as supplementary staff such as messengers, ushers, typists, and other general-support people. Contracts for equipment rentals have been signed. Staff hiring will be completed shortly before the commencement of the meeting.

On 23 October, the Minister, on behalf of the Government of Canada, signed an agreement with the CITES Secretary General, Mr. Eugene Lapointe, to hold the Sixth Meeting of the Conference of Parties to CITES in Canada on 12-24 July 1987.

A small CITES delegation consisting of two Canadian Wildlife Service (CWS) officers and the Northwest Territories CITES representative attended a CITES Technical Committee Meeting held in Lausanne, Switzerland, in June 1986. During the meeting, a number of potential proposals to amend the CITES Appendices and a number of draft resolutions were discussed in preparation for the 1987 Meeting in Ottawa.

The 14th Meeting of the CITES Standing Committee took place in Ottawa during October in order to finalize the agenda and other matters pertaining to the July 1987 Meeting of the Conference of Parties to CITES. A strong Canadian delegation headed by the Director General, CWS, and a number of federal and provincial government observers attended the meeting.

Transportation of live animals

In June 1986, the CITES Administrator, in his capacity as Chairman of the CITES Working Group on Transportation, attended an International Air Transport Association (IATA) Live Animals Board Meeting in Geneva. The board reviewed the Live Animal Regulations concerning "container notes" that are applicable to crating, feeding, loading, and general handling of animals in transit. The Parties to CITES have accepted the IATA Live Animal Regulations as meeting CITES requirements for the transportation of live animals by air carriers.

Training

CITES training of Revenue Canada Customs and Excise officers and Royal Canadian Mounted Police (RCMP) officers continued, but at a reduced scale. During 1986, fewer requests for assistance in providing training programs were received from the RCMP and Revenue Canada. CWS did, however, meet all requests for such training, within budget restraints.

Enforcement

During January 1987, responsibility for the enforcement-related aspects of CITES was transferred from the Program, Marketing and Operational Services Branch to the Legislation, Regulations and Enforcement (LRE) Division of the Migratory Birds and Wildlife Conservation Branch. Under the new arrangement, LRE will be the primary CWS contact for Revenue Canada Customs and Excise and the RCMP concerning investigations and the detention, seizure, and forfeiture of CITES goods. The CITES Administrator will continue to look after the international CITES responsibilities, Canadian CITES permit policy, and the issuance of CITES permits.

Permits

During 1986, the federal government issued 71 (42)* Transit Certificates for the temporary export or import of CITES specimens and 42 (47) Scientific Certificates for the exchange of prepared and catalogued specimens between scientists or scientific research organizations. During the same period, the following CITES export and import permits were issued:

Authority	Export	Import
Federal	1709 (922)*	85 (52)
Alberta	103 (130)	-
British Columbia	875 (845)	-

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* Comparable 1985 figures are shown in parentheses.

(Cont'd)

Authority	Export	Import
Manitoba	142 (82)	-
New Brunswick	3 (3)	-
Newfoundland	0 (2)	-
Nova Scotia	3 (3)	-
Ontario	974 (734)	-
Prince Edward Island	10 (0)	-
Quebec	1236 (1261)	-
Saskatchewan	22 (13)	-
Northwest Territories	34 (14)	-
Yukon	168 (174)	-

Report

POLAR BEAR ADMINISTRATIVE COMMITTEE (PBAC)

Ian Stirling and Kevin Lloyd
Canadian Wildlife Service

The 1987 meeting was held on 14 June. A wide range of management and research problems was dealt with. The 1987 zones and quotas were reviewed and approved. The Northwest Territories (NWT) representative noted that the reduction in quotas for eastern Baffin Island from 67 to 25 at Clyde and Broughton Island will remain in effect for another 5 years to allow the population to recover from an apparent overharvest situation. Some changes in the boundaries of some management zones are being contemplated within NWT, but this will not affect quotas.

In April, the NWT hosted an extremely successful international conference on people-bear conflicts at which the experiences of many people and jurisdictions were brought together. Research on a projectile that can be fired from a 12-gauge shotgun looks particularly promising. Efforts are being made to continue research on deterrents and detection systems, and the importance of co-ordination between the jurisdictions was emphasized. The NWT will continue to play a lead role.

Telazol has been field-tested on over 1000 polar bears and found to be particularly effective. The mortality rate of bears due to handling is very low, and there seem to be few detectable side effects. The drug is now commercially available from France under the trade name of Zoletil 500.

Discussions between the Canadian and Alaskan Inuit to develop a users' agreement on quotas and management of polar bears in the Beaufort Sea are continuing. A draft has now been developed, and it is hoped the agreement will be completed and in place within the next year. If this occurs, it will be the first time in the history of the management of polar bears that user groups from different jurisdictions have met together of their own accord to solve a serious conservation problem. It could be an extremely valuable precedent for further direct involvement of native people in the management of shared populations of both polar bears and other species of wildlife in the Arctic.

A set of guidelines for dividing the sustainable harvest from populations of polar bears that are shared between jurisdictions was accepted. These guidelines include consideration of the scientific information available, traditional hunting patterns, non-hunting mortality, non-consumptive use, aboriginal land claims or treaties, and estimated jurisdictional and international effects. The acceptance of this important agreement now is timely, because it is anticipated that sustainable quotas from several shared populations will have to be negotiated in the next few years.

It was noted that there has been an extremely rapid increase in public interest in viewing wild polar bears in recent years. This has led to concern about possible harassment and displacement of bears from areas of preferred habitat. The viewing of polar bears was endorsed by the PBAC, but it was agreed that some guidelines for viewing facilities and the activities of viewers should be considered for the mutual benefit of both bears and people.

RECOMMENDATIONS OF THE 51ST FEDERAL-PROVINCIAL/TERRITORIAL WILDLIFE CONFERENCE

Recommendation No. 1 (Appreciation for hospitality)

That the conference express its appreciation to the Government of the Northwest Territories and to the Hon. Red Pedersen, Jim Bourque, Kevin Lloyd, Paul Gray, Mika Sutherland, and other staff of the Department of Renewable Resources of the Northwest Territories for the excellent arrangements and fine northern hospitality extended to the delegates of the 51st Federal-Provincial/Territorial Wildlife Conference.

Recommendation No. 2 (Appreciation for reception)

That the conference express its appreciation to Environment Canada and the Canadian Wildlife Service for the reception on the eve of the 51st Federal-Provincial/Territorial Wildlife Conference.

Recommendation No. 3 (Appreciation for banquet)

That the conference express its appreciation to the Northwest Territories Department of Renewable Resources, Wildlife Management Division, for the memorable banquet on 18 June.

Recommendation No. 4 (Appreciation for breakfast)

That the conference express its appreciation to Ducks Unlimited (Canada) for hosting a breakfast on 17 June.

Recommendation No. 5 (Appreciation for hospitality)

That the conference express its appreciation to Mayor John Steen, Nellie Cournoyea, and the people of Tuktoyaktuk for their fine hospitality throughout the week of the conference.

Recommendation No. 6 (Appreciation for auction items)

That the conference express its appreciation to all those organizations and individuals who so generously donated items to the auction for the benefit of the people of Tuktoyaktuk, and to Ken Brynaert for his super job as auctioneer.

Recommendation No. 7 (Forest-sector strategy)

Whereas the forest (timber) interests in Canada have developed a draft national forest-sector strategy for Canada, and whereas there has been limited opportunity for wildlife interests to participate in the drafting of this strategy, and

whereas there has been considerable effort by this conference to encourage the linkage of wildlife and forest interests,

therefore it is recommended that the Conference Secretary immediately contact counterparts in the federal department of Agriculture Canada (Canadian Forestry Service) to request broader distribution of this draft strategy and confirm this conference's support of a "forest"-sector rather than a "wood"-sector approach.

Recommendation No. 8 (Wildlife '87: An Agenda for Tomorrow)

Whereas the 1987 51st Federal-Provincial/Territorial Wildlife Conference theme is "An Agenda for Tomorrow," and

whereas the conference workshops have provided the basis of the text of a draft "An Agenda for Tomorrow,"

therefore it is recommended that a task force prepare a draft of a publication entitled "Wildlife '87: An Agenda for Tomorrow" for review and adoption at the 1988 52nd Federal-Provincial/Territorial Wildlife Conference.

Recommendation No. 9 (Trapping standards)

It is recommended that the conference support the establishment of national minimum standards for trapper-education courses, mandatory trapper education for first-time trappers, and trapping regulations. These recommendations shall form part of the Wildlife '87: An Agenda for Tomorrow.

Recommendation No. 10 (Theme for 1988 conference)

Assuming that by 1988 governments will have had time to evaluate the recommendations put forward by the Brundtland Commission and Canadian Council of Resource and Environment Ministers (CCREM) Task Force on Sustainable Development, and

taking into account that many jurisdictions have developed or are in the process of developing conservation strategies,

therefore it is recommended that the 1988 52nd Federal-Provincial/Territorial Wildlife Conference consider as its theme "Sustainable Development."

Recommendation No. 11 (Review of Guidelines for a Wildlife Policy in Canada)

Whereas the Guidelines for a Wildlife Policy in Canada were adopted by the Wildlife Ministers' Conference in 1982, and

whereas that document requires that a review be undertaken after 5 years,

therefore it is recommended that the Federal-Provincial/Territorial Wildlife Conference establish a working group to undertake this task and report back to the 1988 52nd Federal-Provincial/Territorial Wildlife Conference.

It is further recommended that during the process of review the working group attempt to define the terms "game ranching" and "game farming."

Recommendation No. 12 (Theme for 1988 National Wildlife Week)

Taking into account that endangerment of wildlife and wildlife habitat is a subject area in which many educators have expressed a high degree of interest, and

agreeing that in addressing this subject emphasis should be placed on the need for habitat improvement and responsible attitudes and actions,

therefore it is recommended that the theme for 1988 National Wildlife Week be "Wildlife Needs Our Help."

Recommendation No. 13 (Porcupine Caribou Herd Agreement)

Whereas the Porcupine caribou herd is a unique and irreplaceable resource shared by Canada and the United States and is of major importance to the maintenance of life-styles of northern peoples as well as a significant element of our circumpolar ecosystems, and

whereas Canada and the United States have initialed an agreement to be ratified in the very near future, to provide for the co-ordinated conservation of this herd and its habitat, and

whereas Canada and the United States have previously taken strong measures to protect key habitats of this herd, in Alaska and Yukon, but

whereas the United States is now considering opening the key calving and post-calving areas for hydrocarbon development,

therefore it is recommended that the Federal-Provincial/Territorial Wildlife Conference encourage both nations to continue to ensure the conservation of this herd through effective population and habitat management measures.

It is further recommended that the congressional delegation touring Alaska in the coming months be encouraged to travel to the Yukon to enable their direct exposure to Canadian perspectives on this issue.

Recommendation No. 14 (Development of advanced techniques for modelling of large-scale ecological systems

It is recommended that support be given to the development of advanced techniques for modelling of large-scale ecological systems to take advantage of new remote-sensing technology and available databases, to assist in predicting the impact of development projects and wildlife programs, especially in the Canadian North.

Recommendation No. 15 (Representation of aboriginal peoples at Federal-Provincial/Territorial Wildlife Conferences)

It is recommended that the Federal-Provincial/Territorial Wildlife Conference recognize the vital role of aboriginal peoples in wildlife management and therefore encourage the full participation of representatives of aboriginal peoples in future conferences.

Recommendation No. 16 (Licensing and co-management)

It is recommended that priority be given to experimentation with new licensing and co-management arrangements that assign rights and responsibilities for managing wildlife resources to users or others.

Recommendation No. 17 (Migratory-birds protocol)

Whereas the Migratory Bird Convention between Canada and the United States has been an effective conservation tool, and

whereas the residents of northern Canada are denied reasonable legal access to harvest this resource because of the restrictive season set by the Migratory Bird Convention, and

whereas previous attempts by the two nations to arrive at a protocol that would amend the convention and enable different hunting seasons in the North were not successfully concluded,

therefore it is recommended that Canada and the United States negotiate a protocol by 1 April 1988 so that a reasonable legal harvest of migratory birds is available to northerners.

INVITATION TO 1988 CONFERENCE

Jim Walker
Director
Wildlife Branch
Government of British Columbia

On behalf of the Province of British Columbia, it is my pleasure to invite you to the 52nd annual Federal-Provincial Wildlife Conference to be held in Victoria, British Columbia, from 14 to 17 June 1988.

British Columbia is a province with probably the greatest diversity of wildlife species in Canada, if not in North America, so it is a fitting place to hold such a conference.

Victoria, BC, is commonly known as the garden city, or some say the retirement capital of the country, because a very high percentage of the people are over 65 years of age. We who live in the city often refer to it as the home of the "newly wed" or the "nearly dead." You will probably find that it is a very exciting place for a week during the conference.

After the marvelous hospitality of the Northwest Territories, it will be very difficult to find ways to improve upon the conference. We do not as yet have a theme for the 1988 Conference, but I would welcome any recommendations from the various jurisdictions.

I would like to extend a special invitation to the native people. I know that some of the issues up here might seem to be more or less specific to the Yukon and the Northwest territories and the northern people, but they are not; Kwakiutl and the Haida and the Coast Salish share the same kind of concerns, and, whatever type of program we have, I know there will be much in it that would be rewarding for the native people. So I would like to invite everyone next year to Victoria, BC--we hope to see a lot of you there. Thank you very much.

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